

SEQUENCE LISTING

<110> INCYTE PHARMACEUTICALS, INC.
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 YUE, Henry
 TANG, Y. Tom
 LAL, Preeti
 CORLEY, Neil C.
 GUEGLER, Karl J.
 BAUGHN, Mariah R.
 AZIMZAI, Yalda
 LU, Dyung Aina M.

<120> MEMBRANE TRANSPORT PROTEINS

<130> PF-0633 PCT

<140> To Be Assigned

<141> Herewith

<150> 09/186,778; unassigned; 09/200,277; unassigned; 09/221,405;
 unassigned; 60/121,896

<151> 1998-11-04; 1998-11-04; 1998-11-24; 1998-11-24; 1998-12-22;
 1998-12-22; 1999-02-26

<160> 43

<170> PERL Program

<210> 1

<211> 384

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 961344CD1

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Ser	Ser	His	Leu	Val	Ser	Arg	Thr	Gln	Asp	Ile	His	Ile	Phe	Arg
				20					25					30
Gln	Val	Thr	Ser	Arg	Gly	Glu	Ala	His	Leu	Glu	Leu	Asn	Ala	Phe
				35					40					45
Arg	Arg	Lys	His	Asp	Cys	Ala	Leu	Val	Ile	Ser	Gly	Asp	Ser	Leu
				50					55					60
Glu	Val	Cys	Leu	Lys	Tyr	Tyr	Glu	His	Glu	Phe	Val	Glu	Leu	Ala
				65					70					75
Cys	Gln	Cys	Pro	Ala	Val	Val	Cys	Cys	Arg	Cys	Ser	Pro	Thr	Gln
				80					85					90
Lys	Ala	Arg	Ile	Val	Thr	Leu	Leu	Gln	Gln	His	Thr	Gly	Arg	Arg
				95					100					105

Thr Cys Ala Ile Gly Asp Gly Gly Asn Asp Val Ser Met Ile Gln		
	110	115 120
Ala Ala Asp Cys Gly Ile Gly Ile Glu Gly Lys Glu Gly Lys Gln		
	125	130 135
Ala Ser Leu Ala Ala Asp Phe Ser Ile Thr Gln Phe Arg His Ile		
	140	145 150
Gly Arg Leu Leu Met Val His Gly Arg Asn Ser Tyr Lys Arg Ser		
	155	160 165
Ala Ala Leu Gly Gln Phe Val Met His Arg Gly Leu Ile Ile Ser		
	170	175 180
Thr Met Gln Ala Val Phe Ser Ser Val Phe Tyr Phe Ala Ser Val		
	185	190 195
Pro Leu Tyr Gln Gly Phe Leu Met Val Gly Tyr Ala Thr Ile Tyr		
	200	205 210
Thr Met Phe Pro Val Phe Ser Leu Val Leu Asp Gln Asp Val Lys		
	215	220 225
Pro Glu Met Ala Met Leu Tyr Pro Glu Leu Tyr Lys Asp Leu Thr		
	230	235 240
Lys Gly Arg Ser Leu Ser Phe Lys Thr Phe Leu Ile Trp Val Leu		
	245	250 255
Ile Ser Ile Tyr Gln Gly Gly Ile Leu Met Tyr Gly Ala Leu Val		
	260	265 270
Leu Phe Glu Ser Glu Phe Val His Val Val Ala Ile Ser Phe Thr		
	275	280 285
Ala Leu Ile Leu Thr Glu Leu Leu Met Val Ala Leu Thr Val Arg		
	290	295 300
Thr Trp His Trp Leu Met Val Val Ala Glu Phe Leu Ser Leu Gly		
	305	310 315
Cys Tyr Val Ser Ser Leu Ala Phe Leu Asn Glu Tyr Phe Gly Ile		
	320	325 330
Gly Arg Val Ser Phe Gly Ala Phe Leu Asp Val Ala Phe Ile Thr		
	335	340 345
Thr Val Thr Phe Leu Trp Lys Val Ser Ala Ile Thr Val Val Ser		
	350	355 360
Cys Leu Pro Leu Tyr Val Leu Lys Tyr Leu Arg Arg Lys Leu Ser		
	365	370 375
Pro Pro Ser Tyr Cys Lys Leu Ala Ser		
	380	

<210> 2

<211> 846

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 3128782CD1

<400> 2

Met Pro Lys Ala Pro Lys Gln Gln Pro Pro Glu Pro Glu Trp Ile		
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Gly Asp Gly Glu Ser Thr Ser Pro Ser Asp Lys Val Val Lys Lys		
	20	25 30
Gly Lys Lys Asp Lys Lys Ile Lys Lys Thr Phe Phe Glu Glu Leu		

35	40	45
Ala Val Glu Asp Lys Gln Ala Gly Glu Glu Glu Lys Val Leu Lys		
50	55	60
Glu Lys Glu Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Lys		
65	70	75
Lys Lys Arg Asp Thr Arg Lys Gly Arg Arg Lys Lys Asp Val Asp		
80	85	90
Asp Asp Gly Glu Glu Lys Glu Leu Met Glu Arg Leu Lys Lys Leu		
95	100	105
Ser Val Pro Thr Ser Asp Glu Glu Asp Glu Val Pro Ala Pro Lys		
110	115	120
Pro Arg Gly Gly Lys Lys Thr Lys Gly Gly Asn Val Phe Ala Ala		
125	130	135
Leu Ile Gln Asp Gln Ser Glu Glu Glu Glu Glu Glu Glu Lys His		
140	145	150
Pro Pro Lys Pro Ala Lys Pro Glu Lys Asn Arg Ile Asn Lys Ala		
155	160	165
Val Ser Glu Glu Gln Gln Pro Ala Leu Lys Gly Lys Lys Gly Lys		
170	175	180
Glu Glu Lys Ser Lys Gly Lys Ala Lys Pro Gln Asn Lys Phe Ala		
185	190	195
Ala Leu Asp Asn Glu Glu Glu Asp Lys Glu Glu Glu Ile Ile Lys		
200	205	210
Glu Lys Glu Pro Pro Lys Gln Gly Lys Glu Lys Ala Lys Lys Ala		
215	220	225
Glu Gln Gly Ser Glu Glu Glu Gly Glu Gly Glu Glu Glu Glu		
230	235	240
Glu Gly Gly Glu Ser Lys Ala Asp Asp Pro Tyr Ala His Leu Ser		
245	250	255
Lys Lys Glu Lys Lys Lys Leu Lys Lys Gln Met Glu Tyr Glu Arg		
260	265	270
Gln Val Ala Ser Leu Lys Ala Ala Asn Ala Ala Glu Asn Asp Phe		
275	280	285
Ser Val Ser Gln Ala Glu Met Ser Ser Arg Gln Ala Met Leu Glu		
290	295	300
Asn Ala Ser Asp Ile Lys Leu Glu Lys Phe Ser Ile Ser Ala His		
305	310	315
Gly Lys Glu Leu Phe Val Asn Ala Asp Leu Tyr Ile Val Ala Gly		
320	325	330
Arg Arg Tyr Gly Leu Val Gly Pro Asn Gly Lys Gly Lys Thr Thr		
335	340	345
Leu Leu Lys His Ile Ala Asn Arg Ala Leu Ser Ile Pro Pro Asn		
350	355	360
Ile Asp Val Leu Leu Cys Glu Gln Glu Val Val Ala Asp Glu Thr		
365	370	375
Pro Ala Val Gln Ala Val Leu Arg Ala Asp Thr Lys Arg Leu Lys		
380	385	390
Leu Leu Glu Glu Glu Arg Arg Leu Gln Gly Gln Leu Glu Gln Gly		
395	400	405
Asp Asp Thr Ala Ala Glu Arg Leu Glu Lys Val Tyr Glu Glu Leu		
410	415	420
Arg Ala Thr Gly Ala Ala Ala Ala Glu Ala Lys Ala Arg Arg Ile		
425	430	435
Leu Ala Gly Leu Gly Phe Asp Pro Glu Met Gln Asn Arg Pro Thr		
440	445	450

Gln Lys Phe Ser Gly Gly Trp Arg Met Arg Val Ser Leu Ala Arg	455	460	465
Ala Leu Phe Met Glu Pro Thr Leu Leu Met Leu Asp Glu Pro Thr	470	475	480
Asn His Leu Asp Leu Asn Ala Val Ile Trp Leu Asn Asn Tyr Leu	485	490	495
Gln Gly Trp Arg Lys Thr Leu Leu Ile Val Ser His Asp Gln Gly	500	505	510
Phe Leu Asp Asp Val Cys Thr Asp Ile Ile His Leu Asp Ala Gln	515	520	525
Arg Leu His Tyr Tyr Arg Gly Asn Tyr Met Thr Phe Lys Lys Met	530	535	540
Tyr Gln Gln Lys Gln Lys Glu Leu Leu Lys Gln Tyr Glu Lys Gln	545	550	555
Glu Lys Lys Leu Lys Glu Leu Lys Ala Gly Gly Lys Ser Thr Lys	560	565	570
Gln Ala Glu Lys Gln Thr Lys Glu Ala Leu Thr Arg Lys Gln Gln	575	580	585
Lys Cys Arg Arg Lys Asn Gln Asp Glu Glu Ser Gln Glu Ala Pro	590	595	600
Glu Leu Leu Lys Arg Pro Lys Glu Tyr Thr Val Arg Phe Thr Phe	605	610	615
Pro Asp Pro Pro Pro Leu Ser Pro Pro Val Leu Gly Leu His Gly	620	625	630
Val Thr Phe Gly Tyr Gln Gly Gln Lys Pro Leu Phe Lys Asn Leu	635	640	645
Asp Phe Gly Ile Asp Met Asp Ser Arg Ile Cys Ile Val Gly Pro	650	655	660
Asn Gly Val Gly Lys Ser Thr Leu Leu Leu Leu Thr Gly Lys	665	670	675
Leu Thr Pro Thr His Gly Glu Met Arg Lys Asn His Arg Leu Lys	680	685	690
Ile Gly Phe Phe Asn Gln Gln Tyr Ala Glu Gln Leu Arg Met Glu	695	700	705
Glu Thr Pro Thr Glu Tyr Leu Gln Arg Gly Phe Asn Leu Pro Tyr	710	715	720
Gln Asp Ala Arg Lys Cys Leu Gly Arg Phe Gly Leu Glu Ser His	725	730	735
Ala His Thr Ile Gln Ile Cys Lys Leu Ser Gly Gly Gln Lys Ala	740	745	750
Arg Val Val Phe Ala Glu Leu Ala Cys Arg Glu Pro Asp Val Leu	755	760	765
Ile Leu Asp Glu Pro Thr Asn Asn Leu Asp Ile Glu Ser Ile Asp	770	775	780
Ala Leu Gly Glu Ala Ile Asn Glu Tyr Lys Gly Ala Val Ile Val	785	790	795
Val Ser His Asp Ala Arg Leu Ile Thr Glu Thr Asn Cys Gln Leu	800	805	810
Trp Val Val Glu Glu Gln Ser Val Ser Gln Ile Asp Gly Asp Phe	815	820	825
Glu Asp Tyr Lys Arg Glu Val Leu Glu Ala Leu Gly Glu Val Met	830	835	840
Val Ser Arg Pro Arg Glu	845		

<210> 3
 <211> 511
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 1720440CD1

<400> 3
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 Lys Leu Gly Val Glu Ala Ala Leu Ile Asn Thr Asn Leu Arg Arg
 20 25 30
 Asp Ala Leu Leu His Cys Leu Thr Thr Ser Arg Ala Arg Ala Leu
 35 40 45
 Val Phe Gly Ser Glu Met Ala Ser Ala Ile Cys Glu Val His Ala
 50 55 60
 Ser Leu Asp Pro Ser Leu Ser Leu Phe Cys Ser Gly Ser Trp Glu
 65 70 75
 Pro Gly Ala Val Pro Pro Ser Thr Glu His Leu Asp Pro Leu Leu
 80 85 90
 Lys Asp Ala Pro Lys His Leu Pro Ser Cys Pro Asp Lys Gly Phe
 95 100 105
 Thr Asp Lys Leu Phe Tyr Ile Tyr Thr Ser Gly Thr Thr Gly Leu
 110 115 120
 Pro Lys Ala Ala Ile Val Val His Ser Arg Tyr Tyr Arg Met Ala
 125 130 135
 Ala Leu Val Tyr Tyr Gly Phe Arg Met Arg Pro Asn Asp Ile Val
 140 145 150
 Tyr Asp Cys Leu Pro Leu Tyr His Ser Ala Gly Asn Ile Val Gly
 155 160 165
 Ile Gly Gln Cys Leu Leu His Gly Met Thr Val Val Ile Arg Lys
 170 175 180
 Lys Phe Ser Ala Ser Arg Phe Trp Asp Asp Cys Ile Lys Tyr Asn
 185 190 195
 Cys Thr Ile Val Gln Tyr Ile Gly Glu Leu Cys Arg Tyr Leu Leu
 200 205 210
 Asn Gln Pro Pro Arg Glu Ala Glu Asn Gln His Gln Val Arg Met
 215 220 225
 Ala Leu Gly Asn Gly Leu Arg Gln Ser Ile Trp Thr Asn Phe Ser
 230 235 240
 Ser Arg Phe His Ile Pro Gln Val Ala Glu Phe Tyr Gly Ala Thr
 245 250 255
 Glu Cys Asn Cys Ser Leu Gly Asn Phe Asp Ser Gln Val Gly Ala
 260 265 270
 Cys Gly Phe Asn Ser Arg Ile Leu Ser Ser Val Tyr Pro Ile Arg
 275 280 285
 Leu Val Arg Val Asn Glu Asp Thr Met Glu Leu Ile Arg Gly Pro
 290 295 300
 Asp Gly Val Cys Ile Pro Cys Gln Pro Gly Glu Pro Gly Gln Leu
 305 310 315
 Val Gly Arg Ile Ile Gln Lys Asp Pro Leu Arg Arg Phe Asp Gly
 320 325 330
 Tyr Leu Asn Gln Gly Ala Asn Asn Lys Lys Ile Ala Lys Asp Val

	335		340		345
Phe Lys Lys Gly Asp Gln Ala Tyr Leu Thr Gly Asp Val Leu Val					
	350		355		360
Met Asp Glu Leu Gly Tyr Leu Tyr Phe Arg Asp Arg Thr Gly Asp					
	365		370		375
Thr Phe Arg Trp Lys Gly Glu Asn Val Ser Thr Thr Glu Val Glu					
	380		385		390
Gly Thr Leu Ser Arg Leu Leu Asp Met Ala Asp Val Ala Val Tyr					
	395		400		405
Gly Val Glu Val Pro Gly Thr Glu Gly Arg Ala Gly Met Ala Ala					
	410		415		420
Val Ala Ser Pro Thr Gly Asn Cys Asp Leu Glu Arg Phe Ala Gln					
	425		430		435
Val Leu Glu Lys Glu Leu Pro Leu Tyr Ala Arg Pro Ile Phe Leu					
	440		445		450
Arg Leu Leu Pro Glu Leu His Lys Thr Gly Thr Tyr Lys Phe Gln					
	455		460		465
Lys Thr Glu Leu Arg Lys Glu Gly Phe Asp Pro Ala Ile Val Lys					
	470		475		480
Asp Pro Leu Phe Tyr Leu Asp Ala Gln Lys Gly Arg Tyr Val Pro					
	485		490		495
Leu Asp Gln Glu Ala Tyr Ser Arg Ile Gln Ala Gly Glu Glu Lys					
	500		505		510
Leu					

<210> 4

<211> 718

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 2274290CD1

<400> 4

Met Leu Val His Leu Phe Arg Val Gly Ile Arg Gly Gly Pro Phe			
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Pro Gly Arg Leu Leu Pro Pro Leu Arg Phe Gln Thr Phe Ser Ala			
	20	25	30
Val Arg Tyr Ser Asp Gly Tyr Arg Ser Ser Ser Leu Leu Arg Ala			
	35	40	45
Val Ala His Leu Arg Ser Gln Leu Trp Ala His Leu Pro Arg Ala			
	50	55	60
Pro Leu Ala Pro Arg Trp Ser Pro Ser Ala Trp Cys Trp Val Gly			
	65	70	75
Gly Ala Leu Leu Gly Pro Met Val Leu Ser Lys His Pro His Leu			
	80	85	90
Cys Leu Val Ala Leu Cys Glu Ala Glu Glu Ala Pro Pro Ala Ser			
	95	100	105
Ser Thr Pro His Val Val Gly Ser Arg Phe Asn Trp Lys Leu Phe			
	110	115	120
Trp Gln Phe Leu His Pro His Leu Leu Val Leu Gly Val Ala Val			
	125	130	135
Val Leu Ala Leu Gly Ala Ala Leu Val Asn Val Gln Ile Pro Leu			

140	145	150
Leu Leu Gly Gln Leu Val Glu Val Val	Ala Lys Tyr Thr Arg Asp	
155	160	165
His Val Gly Ser Phe Met Thr Glu Ser	Gln Asn Leu Ser Thr His	
170	175	180
Leu Leu Ile Leu Tyr Gly Val Gln Gly	Leu Leu Thr Phe Gly Tyr	
185	190	195
Leu Val Leu Leu Ser His Val Gly Glu	Arg Met Ala Val Asp Met	
200	205	210
Arg Arg Ala Leu Phe Ser Ser Leu Leu	Arg Gln Asp Ile Thr Phe	
215	220	225
Phe Asp Ala Asn Lys Thr Gly Gln Leu	Val Ser Arg Leu Thr Thr	
230	235	240
Asp Val Gln Glu Phe Lys Ser Ser Phe	Lys Leu Val Ile Ser Gln	
245	250	255
Gly Leu Arg Ser Cys Thr Gln Val Ala	Gly Cys Leu Val Ser Leu	
260	265	270
Ser Met Leu Ser Thr Arg Leu Thr Leu	Leu Leu Met Val Ala Thr	
275	280	285
Pro Ala Leu Met Gly Val Gly Thr Leu	Met Gly Ser Gly Leu Arg	
290	295	300
Lys Leu Ser Arg Gln Cys Gln Glu Gln	Ile Ala Arg Ala Met Gly	
305	310	315
Val Ala Asp Glu Ala Leu Gly Asn Val	Arg Thr Val Arg Ala Phe	
320	325	330
Ala Met Glu Gln Arg Glu Glu Glu Arg	Tyr Gly Ala Glu Leu Glu	
335	340	345
Ala Cys Arg Cys Arg Ala Glu Glu Leu	Gly Arg Gly Ile Ala Leu	
350	355	360
Phe Gln Gly Leu Ser Asn Ile Ala Phe	Asn Cys Met Val Leu Gly	
365	370	375
Thr Leu Phe Ile Gly Gly Ser Leu Val	Ala Gly Gln Gln Leu Thr	
380	385	390
Gly Gly Asp Leu Met Ser Phe Leu Val	Ala Ser Gln Thr Val Gln	
395	400	405
Arg Ser Met Ala Asn Leu Ser Val Leu	Phe Gly Gln Val Val Arg	
410	415	420
Gly Leu Ser Ala Gly Ala Arg Val Phe	Glu Tyr Met Ala Leu Asn	
425	430	435
Pro Cys Ile Pro Leu Ser Gly Gly Cys	Cys Val Pro Lys Glu Gln	
440	445	450
Leu Arg Gly Ser Val Thr Phe Gln Asn	Val Cys Phe Ser Tyr Pro	
455	460	465
Cys Arg Pro Gly Phe Glu Val Leu Lys	Asp Phe Thr Leu Thr Leu	
470	475	480
Pro Pro Gly Lys Ile Val Ala Leu Val	Gly Gln Ser Gly Gly Gly	
485	490	495
Lys Thr Thr Val Ala Ser Leu Leu Glu	Arg Phe Tyr Asp Pro Thr	
500	505	510
Ala Gly Val Val Met Leu Asp Gly Arg	Asp Leu Arg Thr Leu Asp	
515	520	525
Pro Ser Trp Leu Arg Gly Gln Val Val	Gly Phe Ile Ser Gln Glu	
530	535	540
Pro Val Leu Phe Gly Thr Thr Ile Met	Glu Asn Ile Arg Phe Gly	
545	550	555

Lys	Leu	Glu	Ala	Ser	Asp	Glu	Glu	Val	Tyr	Thr	Ala	Ala	Arg	Glu	
				560					565					570	
Ala	Asn	Ala	His	Glu	Phe	Ile	Thr	Ser	Phe	Pro	Glu	Gly	Tyr	Asn	
				575					580					585	
Thr	Val	Val	Gly	Glu	Arg	Gly	Thr	Thr	Leu	Ser	Gly	Gly	Gln	Lys	
				590					595					600	
Gln	Arg	Leu	Ala	Ile	Ala	Arg	Ala	Leu	Ile	Lys	Gln	Pro	Thr	Val	
				605					610					615	
Leu	Ile	Leu	Asp	Glu	Ala	Thr	Ser	Ala	Leu	Asp	Ala	Glu	Ser	Glu	
				620					625					630	
Arg	Val	Val	Gln	Glu	Ala	Leu	Asp	Arg	Ala	Ser	Ala	Gly	Arg	Thr	
				635					640					645	
Val	Leu	Val	Ile	Ala	His	Arg	Leu	Ser	Thr	Val	Arg	Gly	Ala	His	
				650					655					660	
Cys	Ile	Val	Val	Met	Ala	Asp	Gly	Arg	Val	Trp	Glu	Ala	Gly	Thr	
				665					670					675	
His	Glu	Glu	Leu	Leu	Lys	Lys	Gly	Gly	Leu	Tyr	Ala	Glu	Leu	Ile	
				680					685					690	
Arg	Arg	Gln	Ala	Leu	Asp	Ala	Pro	Arg	Thr	Ala	Ala	Pro	Pro	Pro	
				695					700					705	
Lys	Lys	Pro	Glu	Gly	Pro	Arg	Ser	His	Gln	His	Lys	Ser			
				710					715						

<210> 5

<211> 635

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 2740029CD1

<400> 5

Met	Ser	Val	Gly	Val	Ser	Thr	Ser	Ala	Pro	Leu	Ser	Pro	Thr	Ser	
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Gly	Thr	Ser	Val	Gly	Met	Ser	Thr	Phe	Ser	Ile	Met	Asp	Tyr	Val	
				20					25					30	
Val	Phe	Val	Leu	Leu	Leu	Val	Leu	Ser	Leu	Ala	Ile	Gly	Leu	Tyr	
				35					40					45	
His	Ala	Cys	Arg	Gly	Trp	Gly	Arg	His	Thr	Val	Gly	Glu	Leu	Leu	
				50					55					60	
Met	Ala	Asp	Arg	Lys	Met	Gly	Cys	Leu	Pro	Val	Ala	Leu	Ser	Leu	
				65					70					75	
Leu	Ala	Thr	Phe	Gln	Ser	Ala	Val	Ala	Ile	Leu	Gly	Val	Pro	Ser	
				80					85					90	
Glu	Ile	Tyr	Arg	Phe	Gly	Thr	Gln	Tyr	Trp	Phe	Leu	Gly	Cys	Cys	
				95					100					105	
Tyr	Phe	Leu	Gly	Leu	Leu	Ile	Pro	Ala	His	Ile	Phe	Ile	Pro	Val	
				110					115					120	
Phe	Tyr	Arg	Leu	His	Leu	Thr	Ser	Ala	Tyr	Glu	Tyr	Leu	Glu	Leu	
				125					130					135	
Arg	Phe	Asn	Lys	Thr	Val	Arg	Val	Cys	Gly	Thr	Val	Thr	Phe	Ile	
				140					145					150	
Phe	Gln	Met	Val	Ile	Tyr	Met	Gly	Val	Val	Leu	Tyr	Ala	Pro	Ser	

	155		160		165
Leu Ala Leu Asn	Ala Val Thr Gly Phe	Asp Leu Trp Leu Ser	Val		
	170		175		180
Leu Ala Leu Gly	Ile Val Cys Thr Val	Tyr Thr Ala Leu Gly	Gly		
	185		190		195
Leu Lys Ala Val	Ile Trp Thr Asp Val	Phe Gln Thr Leu Val	Met		
	200		205		210
Phe Leu Gly Gln	Leu Ala Val Ile Ile	Val Gly Ser Ala Lys	Val		
	215		220		225
Gly Gly Leu Gly	Arg Val Trp Ala Val	Ala Ser Gln His Gly	Arg		
	230		235		240
Ile Ser Gly Phe	Glu Leu Asp Pro Asp	Pro Phe Val Arg His	Thr		
	245		250		255
Phe Trp Thr Leu	Ala Phe Gly Gly Val	Phe Met Met Leu Ser	Leu		
	260		265		270
Tyr Gly Val Asn	Gln Ala Gln Val Gln	Arg Tyr Leu Ser Ser	Arg		
	275		280		285
Thr Glu Lys Ala	Ala Val Leu Ser Cys	Tyr Ala Val Phe Pro	Phe		
	290		295		300
Gln Gln Val Ser	Leu Cys Val Gly Cys	Leu Ile Gly Leu Val	Met		
	305		310		315
Phe Ala Tyr Tyr	Gln Glu Tyr Pro Met	Ser Ile Gln Gln Ala	Gln		
	320		325		330
Ala Ala Pro Asp	Gln Phe Val Leu Tyr	Phe Val Met Asp Leu	Leu		
	335		340		345
Lys Gly Leu Pro	Gly Leu Pro Gly Leu	Phe Ile Ala Cys Leu	Phe		
	350		355		360
Ser Gly Ser Leu	Ser Thr Ile Ser Ser	Ala Phe Asn Ser Leu	Ala		
	365		370		375
Thr Val Thr Met	Glu Asp Leu Ile Arg	Pro Trp Phe Pro Glu	Phe		
	380		385		390
Ser Glu Ala Arg	Ala Ile Met Leu Ser	Arg Gly Leu Ala Phe	Gly		
	395		400		405
Tyr Gly Leu Leu	Cys Leu Gly Met Ala	Tyr Ile Ser Ser Gln	Met		
	410		415		420
Gly Pro Val Leu	Gln Ala Ala Ile Ser	Ile Phe Gly Met Val	Gly		
	425		430		435
Gly Pro Leu Leu	Gly Leu Phe Cys Leu	Gly Met Phe Phe Pro	Cys		
	440		445		450
Ala Asn Pro Pro	Gly Ala Val Val Gly	Leu Leu Ala Gly Leu	Val		
	455		460		465
Met Ala Phe Trp	Ile Gly Ile Gly Ser	Ile Val Thr Ser Met	Gly		
	470		475		480
Ser Ser Met Pro	Pro Ser Pro Ser Asn	Gly Ser Ser Phe Ser	Leu		
	485		490		495
Pro Thr Asn Leu	Thr Val Ala Thr Val	Thr Thr Leu Met Pro	Leu		
	500		505		510
Thr Thr Phe Ser	Lys Pro Thr Gly Leu	Gln Arg Phe Tyr Ser	Leu		
	515		520		525
Ser Tyr Leu Trp	Tyr Ser Ala His Asn	Ser Thr Thr Val Ile	Val		
	530		535		540
Val Gly Leu Ile	Val Ser Leu Leu Thr	Gly Arg Met Arg Gly	Arg		
	545		550		555
Ser Leu Asn Pro	Ala Thr Ile Tyr Pro	Val Leu Pro Lys Leu	Leu		
	560		565		570

Ser	Leu	Leu	Pro	Leu	Ser	Cys	Gln	Lys	Arg	Leu	His	Cys	Arg	Ser
				575					580					585
Tyr	Gly	Gln	Asp	His	Leu	Asp	Thr	Gly	Leu	Phe	Pro	Glu	Lys	Pro
				590					595					600
Arg	Asn	Gly	Val	Leu	Gly	Asp	Ser	Arg	Asp	Lys	Glu	Ala	Met	Ala
				605					610					615
Leu	Asp	Gly	Thr	Ala	Tyr	Gln	Gly	Ser	Ser	Ser	Thr	Cys	Ile	Leu
				620					625					630
Gln	Glu	Thr	Ser	Leu										
				635										

<210> 6

<211> 535

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 2414415CD1

<400> 6

Met	Glu	Glu	Gly	Ala	Arg	His	Arg	Asn	Asn	Thr	Glu	Lys	Lys	His
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Pro	Gly	Gly	Gly	Glu	Ser	Asp	Ala	Ser	Pro	Glu	Ala	Gly	Ser	Gly
				20					25					30
Gly	Gly	Gly	Val	Ala	Leu	Lys	Lys	Glu	Ile	Gly	Leu	Val	Ser	Ala
				35					40					45
Cys	Gly	Ile	Ile	Val	Gly	Asn	Ile	Ile	Gly	Ser	Gly	Ile	Phe	Val
				50					55					60
Ser	Pro	Lys	Gly	Val	Leu	Glu	Asn	Ala	Gly	Ser	Val	Gly	Leu	Ala
				65					70					75
Leu	Ile	Val	Trp	Ile	Val	Thr	Gly	Phe	Ile	Thr	Val	Val	Gly	Ala
				80					85					90
Leu	Cys	Tyr	Ala	Glu	Leu	Gly	Val	Thr	Ile	Pro	Lys	Ser	Gly	Gly
				95					100					105
Asp	Tyr	Ser	Tyr	Val	Lys	Asp	Ile	Phe	Gly	Gly	Leu	Ala	Gly	Phe
				110					115					120
Leu	Arg	Leu	Trp	Ile	Ala	Val	Leu	Val	Ile	Tyr	Pro	Thr	Asn	Gln
				125					130					135
Ala	Val	Ile	Ala	Leu	Thr	Phe	Ser	Asn	Tyr	Val	Leu	Gln	Pro	Leu
				140					145					150
Phe	Pro	Thr	Cys	Phe	Pro	Pro	Glu	Ser	Gly	Leu	Arg	Leu	Leu	Ala
				155					160					165
Ala	Ile	Cys	Leu	Leu	Leu	Leu	Thr	Trp	Val	Asn	Cys	Ser	Ser	Val
				170					175					180
Arg	Trp	Ala	Thr	Arg	Val	Gln	Asp	Ile	Phe	Thr	Ala	Gly	Lys	Leu
				185					190					195
Leu	Ala	Leu	Ala	Leu	Ile	Ile	Ile	Met	Gly	Ile	Val	Gln	Ile	Cys
				200					205					210
Lys	Gly	Glu	Tyr	Phe	Trp	Leu	Glu	Pro	Lys	Asn	Ala	Phe	Glu	Asn
				215					220					225
Phe	Gln	Glu	Pro	Asp	Ile	Gly	Leu	Val	Ala	Leu	Ala	Phe	Leu	Gln
				230					235					240
Gly	Ser	Phe	Ala	Tyr	Gly	Gly	Trp	Asn	Phe	Leu	Asn	Tyr	Val	Thr

	245		250		255
Glu Glu Leu Val	Asp Pro Tyr Lys Asn	Leu Pro Arg Ala Ile	Phe		
	260		265		270
Ile Ser Ile Pro	Leu Val Thr Phe Val	Tyr Val Phe Ala Asn	Val		
	275		280		285
Ala Tyr Val Thr	Ala Met Ser Pro Gln	Glu Leu Leu Ala Ser	Asn		
	290		295		300
Ala Val Ala Val	Thr Phe Gly Glu Lys	Leu Leu Gly Val Met	Ala		
	305		310		315
Trp Ile Met Pro	Ile Ser Val Ala Leu	Ser Thr Phe Gly Gly	Val		
	320		325		330
Asn Gly Ser Leu	Phe Thr Ser Ser Arg	Leu Phe Phe Ala Gly	Ala		
	335		340		345
Arg Glu Gly His	Leu Pro Ser Val Leu	Ala Met Ile His Val	Lys		
	350		355		360
Arg Cys Thr Pro	Ile Pro Ala Leu Leu	Phe Thr Cys Ile Ser	Thr		
	365		370		375
Leu Leu Met Leu	Val Thr Ser Asp Met	Tyr Thr Leu Ile Asn	Tyr		
	380		385		390
Val Gly Phe Ile	Asn Tyr Leu Phe Tyr	Gly Val Thr Val Ala	Gly		
	395		400		405
Gln Ile Val Leu	Arg Trp Lys Lys Pro	Asp Ile Pro Arg Pro	Ile		
	410		415		420
Lys Ile Asn Leu	Leu Phe Pro Ile Ile	Tyr Leu Leu Phe Trp	Ala		
	425		430		435
Phe Leu Leu Val	Phe Ser Leu Trp Ser	Glu Pro Val Val Cys	Gly		
	440		445		450
Ile Gly Leu Ala	Ile Met Leu Thr Gly	Val Pro Val Tyr Phe	Leu		
	455		460		465
Gly Val Tyr Trp	Gln His Lys Pro Lys	Cys Phe Ser Asp Phe	Ile		
	470		475		480
Glu Leu Leu Thr	Leu Val Ser Gln Lys	Met Cys Val Val Val	Tyr		
	485		490		495
Pro Glu Val Glu	Arg Gly Ser Gly Thr	Glu Glu Ala Asn Glu	Asp		
	500		505		510
Met Glu Glu Gln	Gln Gln Pro Met Tyr	Gln Pro Thr Pro Thr	Lys		
	515		520		525
Asp Lys Asp Val	Ala Gly Gln Pro Gln	Pro			
	530		535		

<210> 7

<211> 456

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 2466714CD1

<400> 7

Met Glu Ala Ser Trp	Gly Ser Phe Asn	Ala Glu Arg Gly Trp	Tyr
1	5	10	15
Val Ser Val Gln Gln	Pro Glu Glu Ala	Glu Ala Glu Glu Leu	Ser
	20	25	30

Pro	Leu	Leu	Ser	Asn	Glu	Leu	His	Arg	Gln	Arg	Ser	Pro	Gly	Val	35	40	45
Ser	Phe	Gly	Leu	Ser	Val	Phe	Asn	Leu	Met	Asn	Ala	Ile	Met	Gly	50	55	60
Ser	Gly	Ile	Leu	Gly	Leu	Ala	Tyr	Val	Met	Ala	Asn	Thr	Gly	Val	65	70	75
Phe	Gly	Phe	Ser	Phe	Leu	Leu	Leu	Thr	Val	Ala	Leu	Leu	Ala	Ser	80	85	90
Tyr	Ser	Val	His	Leu	Leu	Leu	Ser	Met	Cys	Ile	Gln	Thr	Ala	Val	95	100	105
Thr	Ser	Tyr	Glu	Asp	Leu	Gly	Leu	Phe	Ala	Phe	Gly	Leu	Pro	Gly	110	115	120
Lys	Leu	Val	Val	Ala	Gly	Thr	Ile	Ile	Ile	Gln	Asn	Ile	Gly	Ala	125	130	135
Met	Ser	Ser	Tyr	Leu	Leu	Ile	Ile	Lys	Thr	Glu	Leu	Pro	Ala	Ala	140	145	150
Ile	Ala	Glu	Phe	Leu	Thr	Gly	Asp	Tyr	Asn	Arg	Tyr	Trp	Tyr	Leu	155	160	165
Asp	Gly	Gln	Thr	Leu	Leu	Ile	Ile	Ile	Cys	Val	Gly	Ile	Val	Phe	170	175	180
Pro	Leu	Ala	Leu	Leu	Pro	Lys	Ile	Gly	Phe	Leu	Gly	Tyr	Thr	Ser	185	190	195
Ser	Leu	Ser	Phe	Phe	Phe	Met	Met	Phe	Phe	Ala	Leu	Val	Val	Ile	200	205	210
Ile	Lys	Lys	Trp	Ser	Ile	Pro	Cys	Pro	Leu	Thr	Leu	Asn	Tyr	Val	215	220	225
Glu	Lys	Gly	Phe	Gln	Ile	Ser	Asn	Val	Thr	Asp	Asp	Cys	Lys	Pro	230	235	240
Lys	Leu	Phe	His	Phe	Ser	Lys	Glu	Ser	Ala	Tyr	Ala	Leu	Pro	Thr	245	250	255
Met	Ala	Phe	Ser	Phe	Leu	Cys	His	Thr	Ser	Ile	Leu	Pro	Ile	Tyr	260	265	270
Cys	Glu	Leu	Gln	Ser	Pro	Ser	Lys	Lys	Arg	Met	Gln	Asn	Val	Thr	275	280	285
Asn	Thr	Ala	Ile	Ala	Leu	Ser	Phe	Leu	Ile	Tyr	Phe	Ile	Ser	Ala	290	295	300
Leu	Phe	Gly	Tyr	Leu	Thr	Phe	Tyr	Asp	Lys	Val	Glu	Ser	Glu	Leu	305	310	315
Leu	Lys	Gly	Tyr	Ser	Lys	Tyr	Leu	Ser	His	Asp	Val	Val	Val	Met	320	325	330
Thr	Val	Lys	Leu	Cys	Ile	Leu	Phe	Ala	Val	Leu	Leu	Thr	Val	Pro	335	340	345
Leu	Ile	His	Phe	Pro	Ala	Arg	Lys	Ala	Val	Thr	Met	Met	Phe	Phe	350	355	360
Ser	Asn	Phe	Pro	Phe	Ser	Trp	Ile	Arg	His	Phe	Leu	Ile	Thr	Leu	365	370	375
Ala	Leu	Asn	Ile	Ile	Ile	Val	Leu	Leu	Ala	Ile	Tyr	Val	Pro	Asp	380	385	390
Ile	Arg	Asn	Val	Phe	Gly	Val	Val	Gly	Ala	Ser	Thr	Ser	Thr	Cys	395	400	405
Leu	Ile	Phe	Ile	Phe	Pro	Gly	Leu	Phe	Tyr	Leu	Lys	Leu	Ser	Arg	410	415	420
Glu	Asp	Phe	Leu	Ser	Trp	Lys	Lys	Leu	Gly	Ala	Phe	Val	Leu	Leu	425	430	435
Ile	Phe	Gly	Ile	Leu	Val	Gly	Asn	Phe	Ser	Leu	Ala	Leu	Ile	Ile			

440
Phe Asp Trp Ile Asn Lys
455

445

450

<210> 8
<211> 325
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2617942CD1

<400> 8
Met Phe Ala Asn Leu Lys Tyr Val Ser Leu Gly Ile Leu Val Phe
1 5 10 15
Gln Thr Thr Ser Leu Val Leu Thr Met Arg Tyr Ser Arg Thr Leu
20 25 30
Lys Glu Glu Gly Pro Arg Tyr Leu Ser Ser Thr Ala Val Val Val
35 40 45
Ala Glu Leu Leu Lys Ile Met Ala Cys Ile Leu Leu Val Tyr Lys
50 55 60
Asp Ser Lys Cys Ser Leu Arg Ala Leu Asn Arg Val Leu His Asp
65 70 75
Glu Ile Leu Asn Lys Pro Met Glu Thr Leu Lys Leu Ala Ile Pro
80 85 90
Ser Gly Ile Tyr Thr Leu Gln Asn Asn Leu Leu Tyr Val Ala Leu
95 100 105
Ser Asn Leu Asp Ala Ala Thr Tyr Gln Val Thr Tyr Gln Leu Lys
110 115 120
Ile Leu Thr Thr Ala Leu Phe Ser Val Ser Met Leu Ser Lys Lys
125 130 135
Leu Gly Val Tyr Gln Trp Leu Ser Leu Val Ile Leu Met Thr Gly
140 145 150
Val Ala Phe Val Gln Trp Pro Ser Asp Ser Gln Leu Asp Ser Lys
155 160 165
Glu Leu Ser Ala Gly Ser Gln Phe Val Gly Leu Met Ala Val Leu
170 175 180
Thr Ala Cys Phe Ser Ser Gly Phe Ala Gly Val Tyr Phe Glu Lys
185 190 195
Ile Leu Lys Glu Thr Lys Gln Ser Val Trp Ile Arg Asn Ile Gln
200 205 210
Leu Gly Phe Phe Gly Ser Ile Phe Gly Leu Met Gly Val Tyr Ile
215 220 225
Tyr Asp Gly Glu Leu Val Ser Lys Asn Gly Phe Phe Gln Gly Tyr
230 235 240
Asn Arg Leu Thr Trp Ile Val Val Val Leu Gln Ala Leu Gly Gly
245 250 255
Leu Val Ile Ala Ala Val Ile Lys Tyr Ala Asp Asn Ile Leu Lys
260 265 270
Gly Phe Ala Thr Ser Leu Ser Ile Ile Leu Ser Thr Leu Ile Ser
275 280 285
Tyr Phe Trp Leu Gln Asp Phe Val Pro Thr Ser Val Phe Phe Leu
290 295 300

20	25	30
Pro Gln Thr Leu Trp Ser Glu Gln Ala Phe Pro Pro Asn Pro Gly		
35	40	45
Gln Val Gly Ile Val Gly Arg Thr Gly Ala Gly Lys Ser Ser Leu		
50	55	60
Ala Ser Gly Leu Leu Arg Leu Pro Glu Ala Ala Glu Gly Gly Ile		
65	70	75
Trp Ile Asp Gly Val Pro Ile Ala His Val Gly Leu His Thr Leu		
80	85	90
Arg Ser Arg Ile Ser Ile Ile Pro Gln Asp Pro Ile Leu Phe Pro		
95	100	105
Gly Ser Leu Arg Met Asn Leu Asp Leu Leu Gln Glu His Ser Asp		
110	115	120
Glu Ala Ile Trp Ala Ala Leu Glu Thr Val Gln Leu Lys Ala Leu		
125	130	135
Val Ala Ser Leu Pro Gly Gln Leu Gln Tyr Lys Cys Ala Asp Arg		
140	145	150
Gly Glu Asp Leu Ser Val Gly Gln Lys Gln Leu Leu Cys Leu Ala		
155	160	165
Arg Ala Leu Leu Arg Lys Thr Gln Ile Leu Ile Leu Asp Glu Ala		
170	175	180
Thr Ala Ala Val Asp Pro Gly Thr Glu Leu Gln Met Gln Ala Met		
185	190	195
Leu Gly Ser Trp Phe Ala Gln Cys Thr Val Leu Leu Ile Ala His		
200	205	210
Arg Leu Arg Ser Val Met Asp Cys Ala Arg Val Leu Val Met Asp		
215	220	225
Lys Gly Gln Val Ala Glu Ser Gly Ser Pro Ala Gln Leu Leu Ala		
230	235	240
Gln Lys Gly Leu Phe Tyr Arg Leu Ala Gln Glu Ser Gly Leu Val		
245	250	255

<210> 11
 <211> 462
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 1413743CD1

<400> 11

Met Ala Gln Val Ser Ile Asn Asn Asp Tyr Ser Glu Trp Asp Leu		
1	5	10
Ser Thr Asp Ala Gly Glu Arg Ala Arg Leu Leu Gln Ser Pro Cys		
20	25	30
Val Asp Thr Ala Pro Lys Ser Glu Trp Glu Ala Ser Pro Gly Gly		
35	40	45
Leu Asp Arg Gly Thr Thr Ser Thr Leu Gly Ala Ile Phe Ile Val		
50	55	60
Val Asn Ala Cys Leu Gly Ala Gly Leu Leu Asn Phe Pro Ala Ala		
65	70	75
Phe Ser Thr Ala Gly Gly Val Ala Ala Gly Ile Ala Leu Gln Met		
80	85	90

Gly Met Leu Val	Phe Ile Ile Ser Gly	Leu Val Ile Leu Ala Tyr	95	100	105
Cys Ser Gln Ala	Ser Asn Glu Arg Thr	Tyr Gln Glu Val Val Trp	110	115	120
Ala Val Cys Gly	Lys Leu Thr Gly Val	Leu Cys Glu Val Ala Ile	125	130	135
Ala Val Tyr Thr	Phe Gly Thr Cys Ile	Ala Phe Leu Ile Ile Ile	140	145	150
Gly Asp Gln Gln	Asp Lys Ile Ile Ala	Val Met Ala Lys Glu Pro	155	160	165
Glu Gly Ala Ser	Gly Pro Trp Tyr Thr	Asp Arg Lys Phe Thr Ile	170	175	180
Ser Leu Thr Ala	Phe Leu Phe Ile Leu	Pro Leu Ser Ile Pro Arg	185	190	195
Glu Ile Gly Phe	Gln Lys Tyr Ala Ser	Phe Leu Ser Val Val Gly	200	205	210
Thr Trp Tyr Val	Thr Ala Ile Val Ile	Ile Lys Tyr Ile Trp Pro	215	220	225
Asp Lys Glu Met	Thr Pro Gly Asn Ile	Leu Thr Arg Pro Ala Ser	230	235	240
Trp Met Ala Val	Phe Asn Ala Met Pro	Thr Ile Cys Phe Gly Phe	245	250	255
Gln Cys His Val	Ser Ser Val Pro Val	Phe Asn Ser Met Gln Gln	260	265	270
Pro Glu Val Lys	Thr Trp Gly Gly Val	Val Thr Ala Ala Met Val	275	280	285
Ile Ala Leu Ala	Val Tyr Met Gly Thr	Gly Ile Cys Gly Phe Leu	290	295	300
Thr Phe Gly Ala	Ala Val Asp Pro Asp	Val Leu Leu Ser Tyr Pro	305	310	315
Ser Glu Asp Met	Ala Val Ala Val Ala	Arg Ala Phe Ile Ile Leu	320	325	330
Ser Val Leu Thr	Ser Tyr Pro Ile Leu	His Phe Cys Gly Arg Ala	335	340	345
Val Val Glu Gly	Leu Trp Leu Arg Tyr	Gln Gly Val Pro Val Glu	350	355	360
Glu Asp Val Gly	Arg Glu Arg Arg Arg	Arg Val Leu Gln Thr Leu	365	370	375
Val Trp Phe Leu	Leu Thr Leu Leu Leu	Ala Leu Phe Ile Pro Asp	380	385	390
Ile Gly Lys Val	Ile Ser Val Ile Gly	Gly Leu Ala Ala Cys Phe	395	400	405
Ile Phe Val Phe	Pro Gly Leu Cys Leu	Ile Gln Ala Lys Leu Ser	410	415	420
Glu Met Glu Glu	Val Lys Pro Ala Ser	Trp Trp Val Leu Val Ser	425	430	435
Tyr Gly Val Leu	Leu Val Thr Leu Gly	Ala Phe Ile Phe Gly Gln	440	445	450
Thr Thr Ala Asn	Ala Ile Phe Val Asp	Leu Leu Ala	455	460	

<210> 12
 <211> 758
 <212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 1733477CD1

<400> 12

Met Gly Leu Ala Asp	Ala Ser Gly Pro Arg	Asp Thr Gln Ala Leu	
1	5	10	15
Leu Ser Ala Thr Gln	Ala Met Asp Leu Arg	Arg Arg Asp Tyr His	
	20	25	30
Met Glu Arg Pro Leu	Leu Asn Gln Glu His	Leu Glu Glu Leu Gly	
	35	40	45
Arg Trp Gly Ser Ala	Pro Arg Thr His Gln	Trp Arg Thr Trp Leu	
	50	55	60
Gln Cys Ser Arg Ala	Arg Ala Tyr Ala Leu	Leu Leu Gln His Leu	
	65	70	75
Pro Val Leu Val Trp	Leu Pro Arg Tyr Pro	Val Arg Asp Trp Leu	
	80	85	90
Leu Gly Asp Leu Leu	Ser Gly Leu Ser Val	Ala Ile Met Gln Leu	
	95	100	105
Pro Gln Gly Leu Ala	Tyr Ala Leu Leu Ala	Gly Leu Pro Pro Val	
	110	115	120
Phe Gly Leu Tyr Ser	Ser Phe Tyr Pro Val	Phe Ile Tyr Phe Leu	
	125	130	135
Phe Gly Thr Ser Arg	His Ile Ser Val Gly	Thr Phe Ala Val Met	
	140	145	150
Ser Val Met Val Gly	Gly Val Thr Glu Ser	Leu Ala Pro Gln Ala	
	155	160	165
Leu Asn Asp Ser Met	Ile Asn Glu Thr Ala	Arg Asp Ala Ala Arg	
	170	175	180
Val Gln Val Ala Ser	Thr Leu Ser Val Leu	Val Gly Leu Phe Gln	
	185	190	195
Val Gly Leu Gly Leu	Ile His Phe Gly Phe	Val Val Thr Tyr Leu	
	200	205	210
Ser Glu Pro Leu Val	Arg Gly Tyr Thr Thr	Ala Ala Ala Val Gln	
	215	220	225
Val Phe Val Ser Gln	Leu Lys Tyr Val Phe	Gly Leu His Leu Ser	
	230	235	240
Ser His Ser Gly Pro	Leu Ser Leu Ile Tyr	Thr Val Leu Glu Val	
	245	250	255
Cys Trp Lys Leu Pro	Gln Ser Lys Val Gly	Thr Val Val Thr Ala	
	260	265	270
Ala Val Ala Gly Val	Val Leu Val Val Val	Lys Leu Leu Asn Asp	
	275	280	285
Lys Leu Gln Gln Gln	Leu Pro Met Pro Ile	Pro Gly Glu Leu Leu	
	290	295	300
Thr Leu Ile Gly Ala	Thr Gly Ile Ser Tyr	Gly Met Gly Leu Lys	
	305	310	315
His Arg Phe Glu Val	Asp Val Val Gly Asn	Ile Pro Ala Gly Leu	
	320	325	330
Val Pro Pro Val Ala	Pro Asn Thr Gln Leu	Phe Ser Lys Leu Val	
	335	340	345
Gly Ser Ala Phe Thr	Ile Ala Val Val Gly	Phe Ala Ile Ala Ile	
	350	355	360

Ser Leu Gly Lys	Ile Phe Ala Leu Arg	His Gly Tyr Arg Val Asp
365		370 375
Ser Asn Gln Glu	Leu Val Ala Leu Gly	Leu Ser Asn Leu Ile Gly
380		385 390
Gly Ile Phe Gln	Cys Phe Pro Val Ser	Cys Ser Met Ser Arg Ser
395		400 405
Leu Val Gln Glu	Ser Thr Gly Gly Asn	Ser Gln Val Ala Gly Ala
410		415 420
Ile Ser Ser Leu	Phe Ile Leu Leu Ile	Ile Val Lys Leu Gly Glu
425		430 435
Leu Phe His Asp	Leu Pro Lys Ala Val	Leu Ala Ala Ile Ile Ile
440		445 450
Val Asn Leu Lys	Gly Met Leu Arg Gln	Leu Ser Asp Met Arg Ser
455		460 465
Leu Trp Lys Ala	Asn Arg Ala Asp Leu	Leu Ile Trp Leu Val Thr
470		475 480
Phe Thr Ala Thr	Ile Leu Leu Asn Leu	Asp Leu Gly Leu Val Val
485		490 495
Ala Val Ile Phe	Ser Leu Leu Leu Val	Val Val Arg Thr Gln Met
500		505 510
Pro His Tyr Ser	Val Leu Gly Gln Val	Pro Asp Thr Asp Ile Tyr
515		520 525
Arg Asp Val Ala	Glu Tyr Ser Glu Ala	Lys Glu Val Arg Gly Val
530		535 540
Lys Val Phe Arg	Ser Ser Ala Thr Val	Tyr Phe Ala Asn Ala Glu
545		550 555
Phe Tyr Ser Asp	Ala Leu Lys Gln Arg	Cys Gly Val Asp Val Asp
560		565 570
Phe Leu Ile Ser	Gln Lys Lys Lys Leu	Leu Lys Lys Gln Glu Gln
575		580 585
Leu Lys Leu Lys	Gln Leu Gln Lys Glu	Glu Lys Leu Arg Lys Gln
590		595 600
Ala Ala Ser Pro	Lys Gly Ala Ser Val	Ser Ile Asn Val Asn Thr
605		610 615
Ser Leu Glu Asp	Met Arg Ser Asn Asn	Val Glu Asp Cys Lys Met
620		625 630
Met Val Ser Ser	Gly Asp Lys Met Glu	Asp Ala Thr Ala Asn Gly
635		640 645
Gln Glu Asp Ser	Lys Ala Pro Asp Gly	Ser Thr Leu Lys Ala Leu
650		655 660
Gly Leu Pro Gln	Pro Asp Phe His Ser	Leu Ile Leu Asp Leu Gly
665		670 675
Ala Leu Ser Phe	Val Asp Thr Val Cys	Leu Lys Ser Leu Lys Asn
680		685 690
Ile Phe His Asp	Phe Arg Glu Ile Glu	Val Glu Val Tyr Met Ala
695		700 705
Ala Cys His Ser	Pro Val Val Ser Gln	Leu Glu Ala Gly His Phe
710		715 720
Phe Asp Ala Ser	Ile Thr Lys Lys His	Leu Phe Ala Ser Val His
725		730 735
Asp Ala Val Thr	Phe Ala Leu Gln His	Pro Arg Pro Val Pro Asp
740		745 750
Ser Pro Val Ser	Val Thr Arg Leu	
755		

<400>	13														
Met	Met	Gly	Pro	Gly	Leu	Ala	Phe	Gly	Leu	Gly	Ser	Leu	Met	Leu	
1				5					10					15	
Arg	Leu	Tyr	Val	Asp	Ile	Asn	Gln	Met	Pro	Glu	Gly	Gly	Ile	Ser	
				20					25					30	
Leu	Thr	Ile	Lys	Asp	Pro	Arg	Trp	Val	Gly	Ala	Trp	Trp	Leu	Gly	
				35					40					45	
Phe	Leu	Ile	Ala	Ala	Gly	Ala	Val	Ala	Leu	Ala	Ala	Ile	Pro	Tyr	
				50					55					60	
Phe	Phe	Phe	Pro	Lys	Glu	Met	Pro	Lys	Glu	Lys	Arg	Glu	Leu	Gln	
				65					70					75	
Phe	Arg	Arg	Lys	Val	Leu	Ala	Val	Thr	Asp	Ser	Pro	Ala	Arg	Lys	
				80					85					90	
Gly	Lys	Asp	Ser	Pro	Ser	Lys	Gln	Ser	Pro	Gly	Glu	Ser	Thr	Lys	
				95					100					105	
Lys	Gln	Asp	Gly	Leu	Val	Gln	Ile	Ala	Pro	Asn	Leu	Thr	Val	Ile	
				110					115					120	
Gln	Phe	Ile	Lys	Val	Phe	Pro	Arg	Val	Leu	Leu	Gln	Thr	Leu	Arg	
				125					130					135	
His	Pro	Ile	Phe	Leu	Leu	Val	Val	Leu	Ser	Gln	Val	Cys	Leu	Ser	
				140					145					150	
Ser	Met	Ala	Ala	Gly	Met	Ala	Thr	Phe	Leu	Pro	Lys	Phe	Leu	Glu	
				155					160					165	
Arg	Gln	Phe	Ser	Ile	Thr	Ala	Ser	Tyr	Ala	Asn	Leu	Leu	Ile	Gly	
				170					175					180	
Cys	Leu	Ser	Phe	Pro	Ser	Val	Ile	Val	Gly	Ile	Val	Val	Gly	Gly	
				185					190					195	
Val	Leu	Val	Lys	Arg	Leu	His	Leu	Gly	Pro	Val	Gly	Cys	Gly	Ala	
				200					205					210	
Leu	Cys	Leu	Leu	Gly	Met	Leu	Leu	Cys	Leu	Phe	Phe	Ser	Leu	Pro	
				215					220					225	
Leu	Phe	Phe	Ile	Gly	Cys	Ser	Ser	His	Gln	Ile	Ala	Gly	Ile	Thr	
				230					235					240	
His	Gln	Thr	Ser	Ala	His	Pro	Gly	Leu	Glu	Leu	Ser	Pro	Ser	Cys	
				245					250					255	
Met	Glu	Ala	Cys	Ser	Cys	Pro	Leu	Asp	Gly	Phe	Asn	Pro	Val	Cys	
				260					265					270	
Asp	Pro	Ser	Thr	Arg	Val	Glu	Tyr	Ile	Thr	Pro	Cys	His	Ala	Gly	
				275					280					285	
Cys	Ser	Ser	Trp	Val	Val	Gln	Asp	Ala	Leu	Asp	Asn	Ser	Gln	Ser	
				290					295					300	
Pro	Pro	Thr	Ser	His	Pro	His	Ala	Gly	His	Gln	His	Leu	Asn	Leu	
				305					310					315	
Arg	Leu	Leu	Gln	Gly	Glu	Thr	Trp	Ala	Ala	Leu	Ala	Gly	Ala	Glu	
				320					325						

335

<210> 14
 <211> 103
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 2656554CD1

<400> 14
 Met Glu Arg Gln Ser Arg Val Met Ser Glu Lys Asp Glu Tyr Gln
 1 5 10 15
 Phe Gln His Gln Gly Ala Val Glu Leu Leu Val Phe Asn Phe Leu
 20 25 30
 Leu Ile Leu Thr Ile Leu Thr Ile Trp Leu Phe Lys Asn His Arg
 35 40 45
 Phe Arg Phe Leu His Glu Thr Gly Gly Ala Met Val Tyr Asp Lys
 50 55 60
 Pro Pro Lys Phe Ala Met Ser Arg Glu Gln Met Ser Gln Ser Cys
 65 70 75
 Ser His Thr Ala His Asn Ala Ser Leu Leu Thr Asp Ala Gly Pro
 80 85 90
 Leu Ser Cys Gly Glu Ser Arg Ala Ser Cys Leu Phe Leu
 95 100

<210> 15
 <211> 123
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 2719228CD1

<400> 15
 Met Gln Gly Met Gly Leu Gly Leu Ser Ser Val Phe Ala Leu Cys
 1 5 10 15
 Leu Gly His Thr Ser Ser Phe Cys Glu Ser Val Val Phe Ala Ser
 20 25 30
 Ala Ser Ile Gly Leu Gln Thr Phe Asn His Ser Gly Ile Ser Val
 35 40 45
 Asn Ile Gln Asp Leu Ala Pro Ser Cys Ala Gly Phe Leu Phe Gly
 50 55 60
 Val Ala Asn Thr Ala Gly Ala Leu Ala Gly Val Val Gly Val Cys
 65 70 75
 Leu Gly Gly Tyr Leu Met Glu Thr Thr Gly Ser Trp Thr Cys Leu
 80 85 90
 Phe Asn Leu Val Ala Ile Ile Ser Asn Leu Gly Leu Cys Thr Phe
 95 100 105
 Leu Val Phe Gly Gln Ala Gln Arg Val Asp Leu Ser Ser Thr His
 110 115 120

Glu Asp Leu

<210> 16
 <211> 222
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 3657824CD1

<400> 16
 Met Lys Gln Glu Ser Ala Ala Pro Asn Thr Pro Pro Thr Ser Gln
 1 5 10 15
 Ser Pro Thr Pro Ser Ala Gln Phe Pro Arg Asn Asp Gly Asp Pro
 20 25 30
 Gln Ala Leu Trp Ile Phe Gly Tyr Gly Ser Leu Val Trp Arg Pro
 35 40 45
 Asp Phe Ala Tyr Ser Asp Ser Arg Val Gly Phe Val Arg Gly Tyr
 50 55 60
 Ser Arg Arg Phe Trp Gln Gly Asp Thr Phe His Arg Gly Ser Asp
 65 70 75
 Lys Met Pro Gly Arg Val Val Thr Leu Leu Glu Asp His Glu Gly
 80 85 90
 Cys Thr Trp Gly Val Ala Tyr Gln Val Gln Gly Glu Gln Val Ser
 95 100 105
 Lys Ala Leu Lys Tyr Leu Asn Val Arg Glu Ala Val Leu Gly Gly
 110 115 120
 Tyr Asp Thr Lys Glu Val Thr Phe Tyr Pro Gln Asp Ala Pro Asp
 125 130 135
 Gln Pro Leu Lys Ala Leu Ala Tyr Val Ala Thr Pro Gln Asn Pro
 140 145 150
 Gly Tyr Leu Gly Pro Ala Pro Glu Glu Ala Ile Ala Thr Gln Ile
 155 160 165
 Leu Ala Cys Arg Gly Phe Ser Gly His Asn Leu Glu Tyr Leu Leu
 170 175 180
 Arg Leu Ala Asp Phe Met Gln Leu Cys Gly Pro Gln Ala Gln Asp
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Phe Trp Gly Leu	Val Gly Ile Ala	Gly Pro Trp Phe	Val Pro Lys
	50	55	60
Gly Pro Asn Arg	Gly Val Ile Ile	Thr Met Leu Val	Ala Thr Ala
	65	70	75
Val Cys Cys Tyr	Leu Phe Trp Leu	Ile Ala Ile Leu	Ala Gln Leu
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<400> 19

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<211> 2549

<212> DNA

<213> Homo sapiens

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<221> misc_feature

<223> Incyte ID No: 1720440CB1

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<211> 2562

<212> DNA

<213> Homo sapiens

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<223> Incyte ID No: 2274290CB1

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<213> Homo sapiens

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<223> Incyte ID No: 2740029CB1

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<211> 2155
<212> DNA
<213> Homo sapiens

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<220>
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<223> Incyte ID No: 2414415CB1

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tgtggtcagc cagcttgagg ctgggcactt cttcgatgca tccatcacca agaagcatct 2220
ctttgcctct gccatgatg ctgtcacctt tgccctccaa caccgaggc ctgtccccga 2280
cagccctgtt tcggtcacca gactctgaac atgctacatc ctgccaaga ctgcacctct 2340
ggaggtgcag ggcaccttg agaagccct caccctagg ccgcctccag gtgctacca 2400
ggagtccct ccatgtacac acacacaact cagggaagga ggtcctggga ctccaagttc 2460
agcgtccag gtctgggaca gggcctgcat gcagtcaggc tggcagtgcc gcggtacagg 2520
gagggaactg gtgcatattt tagcctcagg aataaagatt tgtctgtcga aaaaaaaaaa 2580

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<210> 30
<211> 1481
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2641908CB1

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<400> 30
tgatgattgt gctggtggtg gtgatcatga cagagacaac aataacaatc atcacatcgt 60
gatggtaatg tcgtgactaa atttgtcatt tagtcacaac gatatgggtg atgtgaatga 120
gggtgatatt taagctgaaa ggaatagaaa tgatgatgac agcaactcgc ccctctacct 180
cgggatcctg tttgcagtga ccatgatggg gccaggcctg gcctttgggc tgggcagcct 240
catgctgcgc ctttatgtgg acattaacca gatgccagaa ggtgggtatca gcctgacct 300
aaaggacccc cgatgggtgg gtgcctggtg gctgggtttc ctcatcgctg ccggtgcagt 360
ggccctggct gccatcccc acttcttctt ccccaaggaa atgccaagg aaaaacgtga 420
gcttcagttt cggcgaaagg tcttagcagt cacagactca cctgccagga agggcaagga 480

```



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ctctccctct aagcagagcc ctggggagtc cacgaagaag caggatggcc tagtccagat 540
tgcaccaaac ctgactgtga tccagttcat taaagtcttc cccaggggtgc tgctgcagac 600
cctacgccac cccatcttcc tgctgggtgt cctgtcccag gtatgcttgt catccatggc 660
tgcgggcatg gccaccttcc tgcccaagtt cctggagcgc cagttttcca tcacagcctc 720
ctacgccaac ctgctcatcg gctgcctctc ctcccttctg gtcatcgtgg gcatcgtggg 780
gggtggcgtc ctgggtcaagc ggctccacct gggccctgtg ggatgcgggt ccctttgcct 840
gctggggatg ctgctgtgcc tcttcttcag cctgccgctc ttctttatcg gctgctccag 900
ccaccagatt gcgggcatca cacaccagac cagtgcccac cctgggctgg agctgtctcc 960
aagctgcatg gaggcctgct cctgcccatt ggacggcttt aaccctgtct gcgaccccag 1020
cactcgtgtg gaatacatca caccctgcc aagcaggctgc tcaagctggg tgggtccagga 1080
tgctctggac aacagccaga gtccctccac ctcccaccct catgctgggc atcagcatct 1140
aaacctgagg ctccctccag gagagacctg ggctgcactg gctgggtgcag aagaacctgt 1200
tgatggtgca tagtccttca gaagccagc aggcaccacc tgggcctgag agcccttcca 1260
gagaccccca ggccttggca ggtggagcag tgaactcctg tggatatggg aaccgattca 1320
aatccttctt aggcctctaa ctgactctgt taccttaggc aaattattta actagtgcct 1380
cagtttcttg gtctgtaaaa taggggagat attattaagt gcctactaca gagcaggaat 1440
gtgctgaata aatgctttac ctggatgaaa aaaaaaaaaa a 1481

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<210> 31
 <211> 667
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 2656554CB1

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<400> 31
ctaaagtggc agtgtttctt ctgaaattct caggcagtca gactgtctta ggcaaatctt 60
gataaaatag ccttatcca ggtttttatc taaggaatcc caagaagact ggggaatgga 120
gagacagtca agggttatgt cagaaaagga tgagtatcag tttcaacatc agggagcggg 180
ggagctgctt gtcttcaatt ttttgtcat ccttaccatt ttgacaatct gggtatttta 240
aatcatcga ttccgcttct tgcatgaaac tggaggagca atggtgtatg acaagccgcc 300
gaaatttgcc atgtcacgag agcaaattgc acagtcatgt tctcacacgg cacataatgc 360
aagtctgttg acagatgcgg gtccattgtc atgtggggag tcgagggcga gctgtttgtt 420
tttgtaatga tgttgggaag tgatggctct gcagtcacaa agagcagcct tctctcactg 480
gctgcaccga tgaacattac gaagtcttag aaaaaacatc acttcaaaat gcctggagta 540
attcctctta tatcaactaa tttcaagaag aaaacttgca gaaactaacc ccaccctctt 600
taagagaata ttgtgtccaa gtccttttta tttatacgaa cagtgtctta ttttcttata 660
atgaaat 667

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<210> 32
 <211> 1635
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 2719228CB1

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<400> 32
atagctgtct tgagcccca gcctcttctt cccctgctgc ccctctgcag ccattcggga 60
tgggaccccc tctgggggtgt cagcacgaaa gggctaacgg gagccccttc cttggcctcc 120

```

```

ccctgtaggt tacagagcca tcacgggtgcg gaagctcatg cagggcatgg gccttggcct 180
ctccagcgtc tttgctctgt gcctgggcca cacctccagc ttctgtgagt ctgtgggtctt 240
tgcacagcc tccatcgcc tccagacctt caaccacagt ggcatctctg ttaacatcca 300
ggacttggcc ccgtcctgcg ccggctttct gtttgggtgtg gccaacacag ccgggggcctt 360
ggcaggtgtc gtgggtgtgt gtctaggcgg ctacttgatg gagaccacgg gctcctggac 420
ttgcctgttc aaccttgttg ccatcatcag caacctgggg ctgtgcacct tcctgggtgtt 480
tggacaggct cagagggtgg acctgagctc taccatgag gacctctagc tcccaacccc 540
acagcctctc caaggaccca ggcgccagca gccccgggac acaggggact cagtgtgtga 600
gacttgggtc ctccatgtca gacacacgag cagagaggaa cacaaccac tgtggagcct 660
gaagctcctt aagaagagtc cacaacagct ggtgggaggg tgggggtggc ctgggtccag 720
accaggctcg ctgctctctg ggctcagtt tccccacctg ccagcgggct cggccctgtc 780
ctcctcacag gctgggtgtg ccgtcaggg gggtgggggtt attgttagta ggcgagcct 840
cattccacc acgatctgtt ccgctgggtt cccgccaaac ctccctcgtt cgccgtgttc 900
tccgcaagcc tcctgcagcg ccgcctgcc aatgtgaggc tggcaccagg ctgcagcctc 960
cccaatccca gccactttg ctgtgtctct ggcgggctgt cctccttggg gggagctgtc 1020
ctgcacactg taggatgctt aaaggtatcc ctggcctcca cccacccta gccagcagct 1080
cccagtcaga caacagccag aaatgtctcc agactctgcc cagcctcccc aggtagccac 1140
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cagtgggtgg gtggcgggct agagacctt gcctgtgtcc gggaccctgg cgccgtctc 1260
ccctcctgtg gatccctccg cactaacagt gttctcagt ggagacgcc tgggcacccc 1320
ttgggcccctg ccagcatgg ccatggcgca ggctctcgaa cccgcatggc tttcccaggc 1380
ctggtgatcc tgctctccag ggacggttgg caccttcctc gggggcgggc cccacgcacc 1440
ccagaacaca cagaccacc tttctggcgt tctttctacc tcccttttcg ttgcctgagg 1500
agctggtggt ttcagtagtt aatgatacat cttgcaagg gtacacatag agaaaaaac 1560
ctaaaaatgt ggaaaagcac gccaaaagcct tatttaaata ataactatta aactattcaa 1620
aaagaaaaaa aaaaa 1635

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<210> 33

<211> 1447

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 3657824CB1

<400> 33

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cagccccgga ggccgcctgg gcctatccct gtgccaggca ccatgaagca ggagtctgca 120
gccccgaaca ccccgccac ctgcagctcc cctacgccgt ccgctcagtt cccccgaaac 180
gacggcgacc ctcaagcgct gtggattttc gggtagcggt ccctgggtgtg gagggccgac 240
ttgcctaca ggcagagccg tgtgggcttc gtgcgcggct acagccgccg tttctggcag 300
ggagacacct tccatcgggg cagcgacaag atgcctggcc gtgtgggtgac gctccttga 360
gatcatgagg gctgcacttg gggcgtggca taccaagtgc aaggggagca ggtaagcaag 420
gccctgaagt acctgaatgt gcgagaggca gtgcttgggt gctacgatac caaggaggtc 480
accttctatc cccaagatgc tcctgaccaa ccaactgaagg cattggccta tgtggccacc 540
ccacagaacc ctggttacct gggccctgcg cctgaagagg ccattgccac gcagatcctg 600
gcctgccggg gcttctccgg ccacaacctt gaataacttg tgcgtctggc agacttcatg 660
cagctctgtg ggctcaggc gcaggacgag cacctggcag ccatcgtgga cgctgtgggc 720
accatgttgc cctgcttctg ccccaccgag caggctctgg cgctgggtgtg aggggctgag 780
ccctgcggg gagtgctcat gtggacatca gggccagaca cccactccag tgcacaagac 840
agacttgoga ccgcttgagc cactgagca gatatgggtg gtggctggag gcttctcttt 900
ctcagtcctt gcctgtctgc cagcctgcag ctctcctgct tgacactgac ttactacttg 960
aaactttatt tattgcacca tgttggtgtg gtgggcagg gtggggcctg ccctggacac 1020

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agggggccctg ctgagcagtg gccccatcct ggaacttgac cagattcccc ccagtgtctgc 1080
tgctaacccc acaccaccca ggcctccacc tccccaggga gtctccaaga gcctcgatcc 1140
tctgtctact cagcccagcc atccatagcc ctgggaattc cacctgcca ggatcccagc 1200
aggctggatg agggatagta gggcatgagg agaaggagcc ctgtaaggac tgaggccccg 1260
gccagccctt ctctccacc agttccccag agcagagctg gagctgatgc ctggacacag 1320
ctgtgagcc tggcctgggc ctcttacc ca ttgtgtgtt ttctgtctgc 1380
tgtctatcta ctgtgtgtc tgggccactc ctgcctgtgt gttggtctat tcctgggaag 1440
ctcatca 1447

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<210> 34
 <211> 657
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 5378485CB1

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<400> 34
gactcctgtt ggcgatgctc agcgcgctgc ccggctgggg acccgcgcac ctgcagcgcc 60
cgctgctcgg ccctgcaccc tgcctgggca tcctgcgccc ggccatgacg gcgcactcat 120
tcgccctccc ggatcatcatc ttcaccacgt tctggggcct cgtcggcatc gccgggccct 180
gggttcgtgcc gaaggagacc aaccgcggag tgatcatcac catgctggtc gccaccgccg 240
tctgtctgta cctcttctgg ctcatcgcca tcctggcgca gctgaacccc ctgttcgggc 300
cccagctgaa gaatgagacc atctggtacg tgcgcttcct gtgggagtga cccgccgcc 360
ccgacccagg tgcccagctc tcggaatgac tgtggctcca ctgtccctga caacccttc 420
gtccggacc ccacccacac aactatgtct ggtaaccagc tccctcctgc tggcaccag 480
agacccggac ccgcaggccc tgcctgggtc ctggaagtct tccagtcct cccagccagc 540
ccggggccct ggggagccct gggcacagca gcggccgagg ggatgtcctg ctccaatact 600
cgcactgctc tggagtttgc actctttcgc aaggagatgc tgctggggag ctggtat 657

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<210> 35
 <211> 646
 <212> PRT
 <213> Mus musculus

<300>
 <308> GenBank ID No: g2612939

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<400> 35
Met Arg Ala Pro Gly Ala Gly Thr Ala Ser Val Ala Ser Leu Ala
1 5 10 15
Leu Leu Trp Phe Leu Gly Leu Pro Trp Thr Trp Ser Ala Ala Ala
20 25 30
Ala Phe Cys Val Tyr Val Gly Gly Gly Gly Trp Arg Phe Leu Arg
35 40 45
Ile Val Cys Lys Thr Ala Arg Arg Asp Leu Phe Gly Leu Ser Val
50 55 60
Leu Ile Arg Val Arg Leu Glu Leu Arg Arg His Arg Arg Ala Gly
65 70 75
Asp Thr Ile Pro Cys Ile Phe Gln Ala Val Ala Arg Arg Gln Pro
80 85 90
Glu Arg Leu Ala Leu Val Asp Ala Ser Ser Gly Ile Cys Trp Thr
95 100 105

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Phe Ala Gln Leu Asp Thr Tyr Ser Asn Ala Val Ala Asn Leu Phe	110	115	120
Arg Gln Leu Gly Phe Ala Pro Gly Asp Val Val Ala Val Phe Leu	125	130	135
Glu Gly Arg Pro Glu Phe Val Gly Leu Trp Leu Gly Leu Ala Lys	140	145	150
Ala Gly Val Val Ala Ala Leu Leu Asn Val Asn Leu Arg Arg Glu	155	160	165
Pro Leu Ala Phe Cys Leu Gly Thr Ser Ala Ala Lys Ala Leu Ile	170	175	180
Tyr Gly Gly Glu Met Ala Ala Ala Val Ala Glu Val Ser Glu Gln	185	190	195
Leu Gly Lys Ser Leu Leu Lys Phe Cys Ser Gly Asp Leu Gly Pro	200	205	210
Glu Ser Ile Leu Pro Asp Thr Gln Leu Leu Asp Pro Met Leu Ala	215	220	225
Glu Ala Pro Thr Thr Pro Leu Ala Gln Ala Pro Gly Lys Gly Met	230	235	240
Asp Asp Arg Leu Phe Tyr Ile Tyr Thr Ser Gly Thr Thr Gly Leu	245	250	255
Pro Lys Ala Ala Ile Val Val His Ser Arg Tyr Tyr Arg Ile Ala	260	265	270
Ala Phe Gly His His Ser Tyr Ser Met Arg Ala Ala Asp Val Leu	275	280	285
Tyr Asp Cys Leu Pro Leu Tyr His Ser Ala Gly Asn Ile Met Gly	290	295	300
Val Gly Gln Cys Val Ile Tyr Gly Leu Thr Val Val Leu Arg Lys	305	310	315
Lys Phe Ser Ala Ser Arg Phe Trp Asp Asp Cys Val Lys Tyr Asn	320	325	330
Cys Thr Val Val Gln Tyr Ile Gly Glu Ile Cys Arg Tyr Leu Leu	335	340	345
Arg Gln Pro Val Arg Asp Val Glu Gln Arg His Arg Val Arg Leu	350	355	360
Ala Val Gly Asn Gly Leu Arg Pro Ala Ile Trp Glu Glu Phe Thr	365	370	375
Gln Arg Phe Gly Val Pro Gln Ile Gly Glu Phe Tyr Gly Ala Thr	380	385	390
Glu Cys Asn Cys Ser Ile Ala Asn Met Asp Gly Lys Val Gly Ser	395	400	405
Cys Gly Phe Asn Ser Arg Ile Leu Thr His Val Tyr Pro Ile Arg	410	415	420
Leu Val Lys Val Asn Glu Asp Thr Met Glu Pro Leu Arg Asp Ser	425	430	435
Glu Gly Leu Cys Ile Pro Cys Gln Pro Gly Glu Pro Gly Leu Leu	440	445	450
Val Gly Gln Ile Asn Gln Gln Asp Pro Leu Arg Arg Phe Asp Gly	455	460	465
Tyr Val Ser Asp Ser Ala Thr Asn Lys Lys Ile Ala His Ser Val	470	475	480
Phe Arg Lys Gly Asp Ser Ala Tyr Leu Ser Gly Asp Val Leu Val	485	490	495
Met Asp Glu Leu Gly Tyr Met Tyr Phe Arg Asp Arg Ser Gly Asp	500	505	510
Thr Phe Arg Trp Arg Gly Glu Asn Val Ser Thr Thr Glu Val Glu			

515	520	525
Ala Val Leu Ser Arg Leu Leu Gly Gln Thr Asp Val Ala Val Tyr		
530	535	540
Gly Val Ala Val Pro Gly Val Glu Gly Lys Ala Gly Met Ala Ala		
545	550	555
Ile Ala Asp Pro His Ser Gln Leu Asp Pro Asn Ser Met Tyr Gln		
560	565	570
Glu Leu Gln Lys Val Leu Ala Ser Tyr Ala Arg Pro Ile Phe Leu		
575	580	585
Arg Leu Leu Pro Gln Val Asp Thr Thr Gly Thr Phe Lys Ile Gln		
590	595	600
Lys Thr Arg Leu Gln Arg Glu Gly Phe Asp Pro Arg Gln Thr Ser		
605	610	615
Asp Arg Leu Phe Phe Leu Asp Leu Lys Gln Gly Arg Tyr Val Pro		
620	625	630
Leu Asp Glu Arg Val His Ala Arg Ile Cys Ala Gly Asp Phe Ser		
635	640	645
Leu		

<210> 36
 <211> 691
 <212> PRT
 <213> Schistosoma mansoni

<300>
 <308> GenBank ID No: g425474

<400> 36

Met Phe Ser Ala Leu Cys Arg Arg Gly Phe Leu Thr Asn Lys Val		
1	5	10
Ser Gln Phe Arg Ser Thr Tyr Lys Cys Asp His Tyr Asn Leu Lys		
	20	25
Thr His Ile Lys Pro Leu Lys Cys Ser Ser Ser Leu Arg Leu Thr		
	35	40
Val Gly Thr Gly Leu Phe Ile Ala Leu His Ser Lys Ile Ser Pro		
	50	55
Glu Ser Arg Ile Gln Thr Val Gln Cys Glu Val Asp Ser Tyr Gln		
	65	70
Thr Asp Gln Ile Thr Phe Ala Lys Ser Gly Gly Ile Pro Arg Tyr		
	80	85
Ile Gly Val Leu Ile Leu Pro Asp Cys Val Tyr Leu Phe Gly Ala		
	95	100
Ile Leu Gly Ala Phe Val Ala Ala Val Met Asn Val Tyr Ile Pro		
	110	115
Leu Tyr Leu Gly Asp Phe Val Ser Ser Leu Ser Arg Cys Val Val		
	125	130
Thr His Glu Gly Phe Val Ser Ala Val Tyr Val Pro Thr Leu Arg		
	140	145
Leu Cys Ser Ser Tyr Leu Leu Gln Ser Leu Ser Thr Phe Leu Tyr		
	155	160
Ile Gly Leu Leu Gly Ser Val Gly Glu Arg Met Ala Arg Arg Met		
	170	175
Arg Ile Gln Leu Phe Arg Lys Leu Val Tyr Gln Asp Val Ala Tyr		
	185	190
		195

Phe Asp Val His Ser Ser Gly Lys Leu Val Glu Ile Ile Gly Ser	200	205	210
Asp Val Gln Asn Phe Lys Ser Ser Phe Lys Gln Cys Ile Ser Gln	215	220	225
Gly Leu Arg Asn Gly Ile Gln Val Val Gly Ser Val Phe Ala Leu	230	235	240
Leu Ser Ile Ser Pro Thr Leu Thr Ala Ala Leu Ile Gly Cys Leu	245	250	255
Pro Cys Val Phe Leu Ile Gly Ser Leu Met Gly Thr Glu Leu Arg	260	265	270
His Ile Ser Arg Glu Val Gln Ser Gln Asn Ser Leu Phe Ala Ser	275	280	285
Leu Ile Asp Glu Ala Phe Ser His Ile Arg Thr Val Lys Ser Leu	290	295	300
Ala Met Glu Asp Phe Leu Ile Asn Lys Ile Asn Tyr Asn Val Asp	305	310	315
Lys Ala Lys Met Leu Ser Glu Lys Leu Ser Phe Gly Ile Gly Ser	320	325	330
Phe Gln Gly Leu Ser Asn Leu Thr Leu Asn Gly Val Val Leu Gly	335	340	345
Val Leu Tyr Val Gly Gly His Leu Met Ser Arg Gly Glu Leu Asp	350	355	360
Ala Gly His Leu Met Ser Phe Leu Ala Thr Thr Gln Thr Leu Gln	365	370	375
Arg Ser Leu Thr Gln Leu Ser Leu Leu Tyr Gly Gln Val Val Arg	380	385	390
Gly Tyr Thr Ala Leu Lys Arg Ile His Asp Ile Leu Ala Leu Pro	395	400	405
Ser Gly Ile Gly Ser Ile Pro Ser Ser Ser Ser Ser Leu Val Val	410	415	420
Ser Lys Gln His Val Asn Asn Ile Lys Glu Leu Pro Ser Ser Ser	425	430	435
Ile Tyr Ser Ala Pro Ser Ile Glu Phe Ser Asp Val Lys Phe Ala	440	445	450
Tyr Pro Asn Arg Pro Glu Thr Ile Val Leu Asn Glu Leu Ser Met	455	460	465
Phe Leu Pro Gly Gly Lys Val Ile Ala Leu Val Gly Gln Ser Gly	470	475	480
Ala Gly Lys Ser Thr Val Val Ser Leu Leu Glu Arg Phe Tyr Asp	485	490	495
Pro Ile Ser Gly Glu Ile Leu Leu Asn Gly Asp Lys Leu Thr Asn	500	505	510
Phe Asn Val Asn Tyr Leu Arg Ser Lys Leu Ile Gly Tyr Ile Ser	515	520	525
Gln Glu Pro Gln Ile Phe Asn Ala Ser Ile Arg Glu Asn Ile Arg	530	535	540
Phe Gly Arg Phe Asp Ala Thr Asp Glu Glu Val Glu Glu Ala Ala	545	550	555
Lys Leu Ala Tyr Ala His Asp Phe Ile Ser Asn Asp Leu Pro Tyr	560	565	570
Gly Tyr Asp Thr Leu Val Gly Gln Gly Thr Gly Thr Ile Ala Gly	575	580	585
Leu Ser Gly Gly Gln Arg Gln Arg Ile Ala Ile Ala Arg Ile Leu	590	595	600
Leu Lys Asn Ala Pro Ile Leu Leu Met Asp Glu Ala Thr Ser Ala			

Leu Asp Thr Glu Ser Glu Ala Lys Val	605	Gln Asn Ala Leu Asn Asn	610	615
	620		625	630
Ala Met Lys Gly Arg Thr Val Leu Ile	635	Ile Ala His Arg Leu Ser	640	645
Thr Val Arg Lys Ala Asp Leu Ile Leu	650	Val Met Ser Lys Gly Gln	655	660
Ile Val Glu Lys Gly Thr His Ser Glu	665	Leu Met Ala Asn His Gly	670	675
Tyr Tyr Tyr Asn Leu Val Gln Arg Gln	680	Glu Gly Cys Asp Val Phe	685	690
Asp				

<210> 37
 <211> 634
 <212> PRT
 <213> Rattus norvegicus

<300>
 <309> GenBank ID No: g3015617

<400> 37

Met Thr Val Ala Ser Thr Ala Ala Pro Ser Tyr Thr Thr Ser Asp	1	5	10	15
Thr Asn Arg Val Ile Ser Thr Phe Ser Val Val Asp Tyr Val Val	20	25	30	
Phe Gly Leu Leu Leu Val Leu Ser Leu Val Ile Gly Leu Tyr His	35	40	45	
Ala Cys Arg Gly Trp Gly Arg His Thr Val Gly Glu Leu Leu Met	50	55	60	
Ala Asp Arg Lys Met Gly Cys Leu Pro Val Ala Leu Ser Leu Leu	65	70	75	
Ala Thr Phe Gln Ser Ala Val Ala Ile Leu Gly Gly Pro Ala Glu	80	85	90	
Ile Tyr Arg Phe Gly Thr Gln Tyr Trp Phe Leu Gly Cys Ser Tyr	95	100	105	
Phe Leu Gly Leu Leu Ile Pro Ala His Ile Phe Ile Pro Val Phe	110	115	120	
Tyr Arg Leu His Leu Thr Ser Ala Tyr Glu Tyr Leu Glu Leu Arg	125	130	135	
Phe Asn Lys Ala Val Arg Ile Cys Gly Thr Val Thr Phe Ile Phe	140	145	150	
Gln Met Val Val Tyr Met Gly Val Ala Leu Tyr Ala Pro Ser Leu	155	160	165	
Ala Leu Asn Ala Val Thr Gly Phe Asp Leu Trp Leu Ser Val Leu	170	175	180	
Ala Leu Gly Ile Val Cys Asn Ile Tyr Thr Ala Leu Gly Gly Leu	185	190	195	
Lys Ala Val Ile Trp Thr Asp Val Phe Gln Thr Leu Ile Met Phe	200	205	210	
Leu Gly Gln Leu Val Val Ile Ile Val Gly Ala Ala Lys Val Gly	215	220	225	
Gly Leu Gly His Val Trp Ala Val Ala Ser Gln His Gly Leu Ile	230	235	240	

Ser Gly Ile Glu Leu Asp Pro Asp Pro Phe Val Arg His Thr Phe	245	250	255
Trp Thr Leu Ala Phe Gly Gly Val Phe Met Met Leu Ser Leu Tyr	260	265	270
Gly Val Asn Gln Ala Gln Val Gln Arg Tyr Leu Ser Ser His Ser	275	280	285
Glu Lys Ala Ala Val Leu Ser Cys Tyr Ala Val Phe Pro Cys Gln	290	295	300
Gln Val Ala Leu Cys Met Ser Cys Leu Ile Gly Leu Val Met Phe	305	310	315
Ala Tyr Tyr Lys Lys Tyr Ser Met Ser Pro Gln Gln Glu Gln Ala	320	325	330
Ala Pro Asp Gln Leu Val Leu Tyr Phe Val Met Asp Leu Leu Lys	335	340	345
Asp Met Pro Gly Leu Pro Gly Leu Phe Val Ala Cys Leu Phe Ser	350	355	360
Gly Ser Leu Ser Thr Ile Ser Ser Ala Phe Asn Ser Leu Ala Thr	365	370	375
Val Thr Met Glu Asp Leu Ile Gln Pro Trp Phe Pro Gln Leu Thr	380	385	390
Glu Thr Arg Ala Ile Met Leu Ser Arg Ser Leu Ala Phe Ala Tyr	395	400	405
Gly Leu Val Cys Leu Gly Met Ala Tyr Val Ser Ser His Leu Gly	410	415	420
Ser Val Leu Gln Ala Ala Leu Ser Ile Phe Gly Met Val Gly Gly	425	430	435
Pro Leu Leu Gly Leu Phe Cys Leu Gly Met Phe Phe Pro Cys Ala	440	445	450
Asn Pro Leu Gly Ala Ile Val Gly Leu Leu Thr Gly Leu Thr Met	455	460	465
Ala Phe Trp Ile Gly Ile Gly Ser Ile Val Ser Arg Met Ser Ser	470	475	480
Ala Ala Ala Ser Pro Pro Leu Asn Gly Ser Ser Ser Phe Leu Pro	485	490	495
Ser Asn Leu Thr Val Ala Thr Val Thr Thr Leu Met Pro Ser Thr	500	505	510
Leu Ser Lys Pro Thr Gly Leu Gln Gln Phe Tyr Ser Leu Ser Tyr	515	520	525
Leu Trp Tyr Ser Ala His Asn Ser Thr Thr Val Ile Ala Val Gly	530	535	540
Leu Ile Val Ser Leu Leu Thr Gly Gly Met Arg Gly Arg Ser Leu	545	550	555
Asn Pro Gly Thr Ile Tyr Pro Val Leu Pro Lys Leu Leu Ala Leu	560	565	570
Leu Pro Leu Ser Cys Gln Lys Arg Leu Cys Trp Arg Ser His Asn	575	580	585
Gln Asp Ile Pro Val Val Thr Asn Leu Phe Pro Glu Lys Met Gly	590	595	600
Asn Gly Ala Leu Gln Asp Ser Arg Asp Lys Glu Arg Met Ala Glu	605	610	615
Asp Gly Leu Val His Gln Pro Cys Ser Pro Thr Tyr Ile Val Gln	620	625	630
Glu Thr Ser Leu			

<210> 38
 <211> 507
 <212> PRT
 <213> Homo sapiens

<300>
 <308> GenBank ID No: g3639058

<400> 38
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 Ala Glu Glu Lys Glu Glu Ala Arg Glu Lys Met Leu Ala Ala Lys
 20 25 30
 Ser Ala Asp Gly Ser Ala Pro Ala Gly Glu Gly Glu Gly Val Thr
 35 40 45
 Leu Gln Arg Asn Ile Thr Leu Leu Asn Gly Val Ala Ile Ile Val
 50 55 60
 Gly Thr Ile Ile Gly Ser Gly Ile Phe Val Thr Pro Thr Gly Val
 65 70 75
 Leu Lys Glu Ala Gly Ser Pro Gly Leu Ala Leu Val Val Trp Ala
 80 85 90
 Ala Cys Gly Val Phe Ser Ile Val Gly Ala Leu Cys Tyr Ala Glu
 95 100 105
 Leu Gly Thr Thr Ile Ser Lys Ser Gly Gly Asp Tyr Ala Tyr Met
 110 115 120
 Leu Glu Val Tyr Gly Ser Leu Pro Ala Phe Leu Lys Leu Trp Ile
 125 130 135
 Glu Leu Leu Ile Ile Arg Pro Ser Ser Gln Tyr Ile Val Ala Leu
 140 145 150
 Val Phe Ala Thr Tyr Leu Leu Lys Pro Leu Phe Pro Thr Cys Pro
 155 160 165
 Val Pro Glu Glu Ala Ala Lys Leu Val Ala Cys Leu Cys Val Leu
 170 175 180
 Leu Leu Thr Ala Val Asn Cys Tyr Ser Val Lys Ala Ala Thr Arg
 185 190 195
 Val Gln Asp Ala Phe Ala Ala Ala Lys Leu Leu Ala Leu Ala Leu
 200 205 210
 Ile Ile Leu Leu Gly Phe Val Gln Ile Gly Lys Gly Asp Val Ser
 215 220 225
 Asn Leu Asp Pro Lys Phe Ser Phe Glu Gly Thr Lys Leu Asp Val
 230 235 240
 Gly Asn Ile Val Leu Ala Leu Tyr Ser Gly Leu Phe Ala Tyr Gly
 245 250 255
 Gly Trp Asn Tyr Leu Asn Phe Val Thr Glu Glu Met Ile Asn Pro
 260 265 270
 Tyr Arg Asn Leu Pro Leu Ala Ile Ile Ile Ser Leu Pro Ile Val
 275 280 285
 Thr Leu Val Tyr Val Leu Thr Asn Leu Ala Tyr Phe Thr Thr Leu
 290 295 300
 Ser Thr Glu Gln Met Leu Ser Ser Glu Ala Val Ala Val Asp Phe
 305 310 315
 Gly Asn Tyr His Leu Gly Val Met Ser Trp Ile Ile Pro Val Phe
 320 325 330
 Val Gly Leu Ser Cys Phe Gly Ser Val Asn Gly Ser Leu Phe Thr

	335		340		345
Ser Ser Arg Leu Phe Phe Val Gly Ser Arg Glu Gly His Leu Pro					
	350		355		360
Ser Ile Leu Ser Met Ile His Pro Gln Leu Leu Thr Pro Val Pro					
	365		370		375
Ser Leu Val Phe Thr Cys Val Met Thr Leu Leu Tyr Ala Phe Ser					
	380		385		390
Lys Asp Ile Phe Ser Val Ile Asn Phe Phe Ser Phe Phe Asn Trp					
	395		400		405
Leu Cys Val Ala Leu Ala Ile Ile Gly Met Ile Trp Leu Arg His					
	410		415		420
Arg Lys Pro Glu Leu Glu Arg Pro Ile Lys Val Asn Leu Ala Leu					
	425		430		435
Pro Val Phe Phe Ile Leu Ala Cys Leu Phe Leu Ile Ala Val Ser					
	440		445		450
Phe Trp Lys Thr Pro Val Glu Cys Gly Ile Gly Phe Thr Ile Ile					
	455		460		465
Leu Ser Gly Leu Pro Val Tyr Phe Phe Gly Val Trp Trp Lys Asn					
	470		475		480
Lys Pro Lys Trp Leu Leu Gln Gly Ile Phe Ser Thr Thr Val Leu					
	485		490		495
Cys Gln Lys Leu Met Gln Val Val Pro Gln Glu Thr					
	500		505		

<210> 39
 <211> 504
 <212> PRT
 <213> Homo sapiens

<300>
 <308> GenBank ID No: g1840045

<400> 39	
Met Glu Ala Pro Leu Gln Thr Glu Met Val Glu Leu Val Pro Asn	
1 5 10 15	
Gly Lys His Ser Glu Gly Leu Leu Pro Val Ile Thr Pro Met Ala	
20 25 30	
Gly Asn Gln Arg Val Glu Asp Pro Ala Arg Ser Cys Met Glu Gly	
35 40 45	
Lys Ser Phe Leu Gln Lys Ser Pro Ser Lys Glu Pro His Phe Thr	
50 55 60	
Asp Phe Glu Gly Lys Thr Ser Phe Gly Met Ser Val Phe Asn Leu	
65 70 75	
Ser Asn Ala Ile Met Gly Ser Gly Ile Leu Gly Leu Ala Tyr Ala	
80 85 90	
Met Ala Asn Thr Gly Ile Ile Leu Phe Leu Phe Leu Leu Thr Ala	
95 100 105	
Val Ala Leu Leu Ser Ser Tyr Ser Ile His Leu Leu Leu Lys Ser	
110 115 120	
Ser Gly Val Val Gly Ile Arg Ala Tyr Glu Gln Leu Gly Tyr Arg	
125 130 135	
Ala Phe Gly Thr Pro Gly Lys Leu Ala Ala Ala Leu Ala Ile Thr	
140 145 150	

Leu Gln Asn Ile Gly Ala Met Ser Ser Tyr Leu Tyr Ile Ile Lys	155	160	165
Ser Glu Leu Pro Leu Val Ile Gln Thr Phe Leu Asn Leu Glu Glu	170	175	180
Lys Thr Ser Asp Trp Tyr Met Asn Gly Asn Tyr Leu Val Ile Leu	185	190	195
Val Ser Val Thr Ile Ile Leu Pro Leu Ala Leu Met Arg Gln Leu	200	205	210
Gly Tyr Leu Gly Tyr Ser Ser Gly Phe Ser Leu Ser Cys Met Val	215	220	225
Phe Phe Leu Ile Ala Val Ile Tyr Lys Lys Phe His Val Pro Cys	230	235	240
Pro Leu Pro Pro Asn Phe Asn Asn Thr Thr Gly Asn Phe Ser His	245	250	255
Val Glu Ile Val Lys Glu Lys Val Gln Leu Gln Val Glu Pro Glu	260	265	270
Ala Ser Ala Phe Cys Thr Pro Ser Tyr Phe Thr Leu Asn Ser Gln	275	280	285
Thr Ala Tyr Thr Ile Pro Ile Met Ala Phe Ala Phe Val Cys His	290	295	300
Pro Glu Val Leu Pro Ile Tyr Thr Glu Leu Lys Asp Pro Ser Lys	305	310	315
Lys Lys Met Gln His Ile Ser Asn Leu Ser Ile Ala Val Met Tyr	320	325	330
Ile Met Tyr Phe Leu Ala Ala Leu Phe Gly Tyr Leu Thr Phe Tyr	335	340	345
Asn Gly Val Glu Ser Glu Leu Leu His Thr Tyr Ser Lys Val Asp	350	355	360
Pro Phe Asp Val Leu Ile Leu Cys Val Arg Val Ala Val Leu Thr	365	370	375
Ala Val Thr Leu Thr Val Pro Ile Val Leu Phe Pro Val Arg Arg	380	385	390
Ala Ile Gln Gln Met Leu Phe Pro Asn Gln Glu Phe Ser Trp Leu	395	400	405
Arg His Val Leu Ile Ala Val Gly Leu Leu Thr Cys Ile Asn Leu	410	415	420
Leu Val Ile Phe Ala Pro Asn Ile Leu Gly Ile Phe Gly Val Ile	425	430	435
Gly Ala Thr Ser Ala Pro Phe Leu Ile Phe Ile Phe Pro Ala Ile	440	445	450
Phe Tyr Phe Arg Ile Met Pro Thr Glu Lys Glu Pro Ala Arg Ser	455	460	465
Thr Pro Lys Ile Leu Ala Leu Cys Phe Ala Met Leu Gly Phe Leu	470	475	480
Leu Met Thr Met Ser Leu Ser Phe Ile Ile Ile Asp Trp Ala Ser	485	490	495
Gly Thr Ser Arg His Gly Gly Asn His	500		

<210> 40
 <211> 393
 <212> PRT
 <213> Homo sapiens

<300>

<308> GenBank ID No: g1526438

<400> 40

Met	Ala	Ala	Val	Gly	Ala	Gly	Gly	Ser	Thr	Ala	Ala	Pro	Gly	Pro
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Gly	Ala	Val	Ser	Ala	Gly	Ala	Leu	Glu	Pro	Gly	Thr	Ala	Ser	Ala
				20					25					30
Ala	His	Arg	Arg	Leu	Lys	Tyr	Ile	Ser	Leu	Ala	Val	Leu	Val	Val
				35					40					45
Gln	Asn	Ala	Ser	Leu	Ile	Leu	Ser	Ile	Arg	Tyr	Ala	Arg	Thr	Leu
				50					55					60
Pro	Gly	Asp	Arg	Phe	Phe	Ala	Thr	Thr	Ala	Val	Val	Met	Ala	Glu
				65					70					75
Val	Leu	Lys	Gly	Leu	Thr	Cys	Leu	Leu	Leu	Leu	Phe	Ala	Gln	Lys
				80					85					90
Arg	Gly	Asn	Val	Lys	His	Leu	Val	Leu	Phe	Leu	His	Glu	Ala	Val
				95					100					105
Leu	Val	Gln	Tyr	Val	Asp	Thr	Leu	Lys	Leu	Ala	Val	Pro	Ser	Leu
				110					115					120
Ile	Tyr	Thr	Leu	Gln	Asn	Asn	Leu	Gln	Tyr	Val	Ala	Ile	Ser	Asn
				125					130					135
Leu	Pro	Ala	Ala	Thr	Phe	Gln	Val	Thr	Tyr	Gln	Leu	Lys	Ile	Leu
				140					145					150
Thr	Thr	Ala	Leu	Phe	Ser	Val	Leu	Met	Leu	Asn	Arg	Ser	Leu	Ser
				155					160					165
Arg	Leu	Gln	Trp	Ala	Ser	Leu	Leu	Leu	Leu	Phe	Thr	Gly	Val	Ala
				170					175					180
Ile	Val	Gln	Ala	Gln	Gln	Ala	Gly	Gly	Gly	Gly	Pro	Arg	Pro	Leu
				185					190					195
Asp	Gln	Asn	Pro	Gly	Ala	Gly	Leu	Ala	Ala	Val	Val	Ala	Ser	Cys
				200					205					210
Leu	Ser	Ser	Gly	Phe	Ala	Gly	Val	Tyr	Phe	Glu	Lys	Ile	Leu	Lys
				215					220					225
Gly	Ser	Ser	Gly	Ser	Val	Trp	Leu	Arg	Asn	Leu	Gln	Leu	Gly	Leu
				230					235					240
Phe	Gly	Thr	Ala	Leu	Gly	Leu	Val	Gly	Leu	Trp	Trp	Ala	Glu	Gly
				245					250					255
Thr	Ala	Val	Ala	Thr	Arg	Gly	Phe	Phe	Phe	Gly	Tyr	Thr	Pro	Ala
				260					265					270
Val	Trp	Gly	Val	Val	Leu	Asn	Gln	Ala	Phe	Gly	Gly	Leu	Leu	Val
				275					280					285
Ala	Val	Val	Val	Lys	Tyr	Ala	Asp	Asn	Ile	Leu	Lys	Gly	Phe	Ala
				290					295					300
Thr	Ser	Leu	Ser	Ile	Val	Leu	Ser	Thr	Val	Ala	Ser	Ile	Arg	Leu
				305					310					315
Phe	Gly	Phe	His	Val	Asp	Pro	Leu	Phe	Ala	Leu	Gly	Ala	Gly	Leu
				320					325					330
Val	Ile	Gly	Ala	Val	Tyr	Leu	Tyr	Ser	Leu	Pro	Arg	Gly	Ala	Ala
				335					340					345
Lys	Ala	Ile	Ala	Ser	Ala	Ser	Ala	Ser	Ala	Ser	Gly	Pro	Cys	Val
				350					355					360
His	Gln	Gln	Pro	Pro	Gly	Gln	Pro	Pro	Pro	Pro	Gln	Leu	Ser	Ser
				365					370					375
His	Arg	Gly	Asp	Leu	Ile	Thr	Glu	Pro	Phe	Leu	Pro	Lys	Ser	Val

Leu Val Lys

380

385

390

<210> 41
 <211> 893
 <212> PRT
 <213> Homo sapiens

<300>

<308> GenBank ID No: g3335175

<400> 41

His Val Gln Asp Phe Thr Ala Phe Trp Asp Lys Ala Ser Glu Thr		
1 5 10 15		
Pro Thr Leu Gln Gly Leu Ser Phe Thr Val Arg Pro Gly Glu Leu		
20 25 30		
Leu Ala Val Val Gly Pro Val Gly Ala Gly Lys Ser Ser Leu Leu		
35 40 45		
Ser Ala Val Leu Gly Glu Leu Ala Pro Ser His Gly Leu Val Ser		
50 55 60		
Val His Gly Arg Ile Ala Tyr Val Ser Gln Gln Pro Trp Val Phe		
65 70 75		
Ser Gly Thr Leu Arg Ser Asn Ile Leu Phe Gly Lys Lys Tyr Glu		
80 85 90		
Lys Glu Arg Tyr Glu Lys Val Ile Lys Ala Cys Ala Leu Lys Lys		
95 100 105		
Asp Leu Gln Leu Leu Glu Asp Gly Asp Leu Thr Val Ile Gly Asp		
110 115 120		
Arg Gly Thr Thr Leu Ser Gly Gly Gln Lys Ala Arg Val Asn Leu		
125 130 135		
Ala Arg Ala Val Tyr Gln Asp Ala Asp Ile Tyr Leu Leu Asp Asp		
140 145 150		
Pro Leu Ser Ala Val Asp Ala Glu Val Ser Arg His Leu Phe Glu		
155 160 165		
Leu Cys Ile Cys Gln Ile Leu His Glu Lys Ile Thr Ile Leu Val		
170 175 180		
Thr His Gln Leu Gln Tyr Leu Lys Ala Ala Ser Gln Ile Leu Ile		
185 190 195		
Leu Lys Asp Gly Lys Met Val Gln Lys Gly Thr Tyr Thr Glu Phe		
200 205 210		
Leu Lys Ser Gly Ile Asp Phe Gly Ser Leu Leu Lys Lys Asp Asn		
215 220 225		
Glu Glu Ser Glu Gln Pro Pro Val Pro Gly Thr Pro Thr Leu Arg		
230 235 240		
Asn Arg Thr Phe Ser Glu Ser Ser Val Trp Ser Gln Gln Ser Ser		
245 250 255		
Arg Pro Ser Leu Lys Asp Gly Ala Leu Glu Ser Gln Asp Thr Glu		
260 265 270		
Asn Val Pro Val Thr Leu Ser Glu Glu Asn Arg Ser Glu Gly Lys		
275 280 285		
Val Gly Phe Gln Ala Tyr Lys Asn Tyr Phe Arg Ala Gly Ala His		
290 295 300		
Trp Ile Val Phe Ile Phe Leu Ile Leu Leu Asn Thr Ala Ala Gln		

Val Ala Tyr Val	305	Leu Gln Asp Trp Trp	310	Leu Ser Tyr Trp Ala Asn	315
Lys Gln Ser Met	320	Leu Asn Val Thr Val	325	Asn Gly Gly Gly Asn Val	330
Thr Glu Lys Leu	335	Asp Leu Asn Trp Tyr	340	Leu Gly Ile Tyr Ser Gly	345
Leu Thr Val Ala	350	Thr Val Leu Phe Gly	355	Ile Ala Arg Ser Leu Leu	360
Val Phe Tyr Val	365	Leu Val Asn Ser Ser	370	Gln Thr Leu His Asn Lys	375
Met Phe Glu Ser	380	Ile Leu Lys Ala Pro	385	Val Leu Phe Phe Asp Arg	390
Asn Pro Ile Gly	395	Arg Ile Leu Asn Arg	400	Phe Ser Lys Asp Ile Gly	405
His Leu Asp Asp	410	Leu Leu Pro Leu Thr	415	Phe Leu Asp Phe Ile Gln	420
Thr Leu Leu Gln	425	Val Val Gly Val Val	430	Ser Val Ala Val Ala Val	435
Ile Pro Trp Ile	440	Ala Ile Pro Leu Val	445	Pro Leu Gly Ile Ile Phe	450
Ile Phe Leu Arg	455	Arg Tyr Phe Leu Glu	460	Thr Ser Arg Asp Val Lys	465
Arg Leu Glu Ser	470	Thr Thr Arg Ser Pro	475	Val Phe Ser His Leu Ser	480
Ser Ser Leu Gln	485	Gly Leu Trp Thr Ile	490	Arg Ala Tyr Lys Ala Glu	495
Glu Arg Cys Gln	500	Glu Leu Phe Asp Ala	505	His Gln Asp Leu His Ser	510
Glu Ala Trp Phe	515	Leu Phe Leu Thr Thr	520	Ser Arg Trp Phe Ala Val	525
Arg Leu Asp Ala	530	Ile Cys Ala Met Phe	535	Val Ile Ile Val Ala Phe	540
Gly Ser Leu Ile	545	Leu Ala Lys Thr Leu	550	Asp Ala Gly Gln Val Gly	555
Leu Ala Leu Ser	560	Tyr Ala Leu Thr Leu	565	Met Gly Met Phe Gln Trp	570
Cys Val Arg Gln	575	Ser Ala Glu Val Glu	580	Asn Met Met Ile Ser Val	585
Glu Arg Val Ile	590	Glu Tyr Thr Asp Leu	595	Glu Lys Glu Ala Pro Trp	600
Glu Tyr Gln Lys	605	Arg Pro Pro Pro Ala	610	Trp Pro His Glu Gly Val	615
Ile Ile Phe Asp	620	Asn Val Asn Phe Met	625	Tyr Ser Pro Gly Gly Pro	630
Leu Val Leu Lys	635	His Leu Thr Ala Leu	640	Ile Lys Ser Gln Glu Lys	645
Val Gly Ile Val	650	Gly Arg Thr Gly Ala	655	Gly Lys Ser Ser Leu Ile	660
Ser Ala Leu Phe	665	Arg Leu Ser Glu Pro	670	Glu Gly Lys Ile Trp Ile	675
Asp Lys Ile Leu	680	Thr Thr Glu Ile Gly	685	Leu His Asp Leu Arg Lys	690
Lys Met Ser Ile	695	Ile Pro Gln Glu Pro	700	Val Leu Phe Thr Gly Thr	705
	710		715		720

Met	Arg	Lys	Asn	Leu	Asp	Pro	Phe	Lys	Glu	His	Thr	Asp	Glu	Glu
				725					730				735	
Leu	Trp	Asn	Ala	Leu	Gln	Glu	Val	Gln	Leu	Lys	Glu	Thr	Ile	Glu
				740					745				750	
Asp	Leu	Pro	Gly	Lys	Met	Asp	Thr	Glu	Leu	Ala	Glu	Ser	Gly	Ser
				755					760				765	
Asn	Phe	Ser	Val	Gly	Gln	Arg	Gln	Leu	Val	Cys	Leu	Ala	Arg	Ala
				770					775				780	
Ile	Leu	Arg	Lys	Asn	Gln	Ile	Leu	Ile	Ile	Asp	Glu	Ala	Thr	Ala
				785					790				795	
Asn	Val	Asp	Pro	Arg	Thr	Asp	Glu	Leu	Ile	Gln	Lys	Lys	Ile	Arg
				800					805				810	
Glu	Lys	Phe	Ala	His	Cys	Thr	Val	Leu	Thr	Ile	Ala	His	Arg	Leu
				815					820				825	
Asn	Thr	Ile	Ile	Asp	Ser	Asp	Lys	Ile	Met	Val	Leu	Asp	Ser	Gly
				830					835				840	
Arg	Leu	Lys	Glu	Tyr	Asp	Glu	Pro	Tyr	Val	Leu	Leu	Gln	Asn	Lys
				845					850				855	
Glu	Ser	Leu	Phe	Tyr	Lys	Met	Val	Gln	Gln	Leu	Gly	Lys	Ala	Glu
				860					865				870	
Ala	Ala	Ala	Leu	Thr	Glu	Thr	Ala	Lys	Gln	Val	Ile	Leu	Gln	Lys
				875					880				885	
Lys	Leu	Ser	Thr	Tyr	Trp	Ser	His							
				890										

<210> 42

<211> 453

<212> PRT

<213> Homo sapiens

<300>

<308> GenBank ID No: g1279457

<400> 42

Met	Ala	Leu	Arg	Gly	Phe	Cys	Ser	Arg	Trp	Leu	Arg	Pro	Ala	Leu
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Ala	Ile	Gly	Leu	Phe	Ala	Ser	Met	Ala	Ala	Val	Leu	Leu	Gly	Gly
				20					25					30
Ala	Arg	Ala	Ser	Arg	Leu	Leu	Phe	Gln	Arg	Leu	Leu	Trp	Asp	Val
				35					40					45
Val	Arg	Ser	Pro	Ile	Ser	Phe	Phe	Glu	Arg	Thr	Pro	Ile	Gly	His
				50					55					60
Leu	Leu	Asn	Arg	Phe	Ser	Lys	Glu	Thr	Asp	Thr	Val	Asp	Val	Asp
				65					70					75
Ile	Pro	Asp	Lys	Leu	Arg	Ser	Leu	Leu	Met	Tyr	Ala	Phe	Gly	Leu
				80					85					90
Leu	Glu	Val	Ser	Leu	Val	Val	Glu	Trp	Pro	Thr	Pro	Leu	Pro	Leu
				95					100					105
Trp	Pro	Ser	Cys	His	Cys	Phe	Ser	Ser	Thr	Leu	Gly	Phe	Arg	Trp
				110					115					120
Leu	Ala	Ala	Asn	Val	Glu	Leu	Leu	Gly	Asn	Gly	Leu	Val	Phe	Ala
				125					130					135
Ala	Ala	Thr	Cys	Ala	Val	Leu	Ser	Lys	Ala	His	Leu	Ser	Ala	Gly
				140					145					150

Leu Val Gly Phe	Ser Val Ser Ala Ala	Leu Gln Val Thr Gln Thr	
155		160	165
Leu Gln Trp Val	Val Arg Asn Trp Thr	Asp Leu Glu Asn Ser Ile	
170		175	180
Val Ser Val Glu	Arg Met Gln Asp Tyr	Ala Trp Thr Pro Lys Glu	
185		190	195
Ala Pro Trp Arg	Leu Pro Thr Cys Ala	Ala Gln Pro Pro Trp Pro	
200		205	210
Gln Gly Gly Gln	Ile Glu Phe Arg Asp	Phe Gly Leu Arg Tyr Arg	
215		220	225
Pro Glu Leu Pro	Leu Ala Val Gln Gly	Val Ser Phe Lys Ile His	
230		235	240
Ala Gly Glu Lys	Val Gly Ile Val Gly	Arg Thr Gly Ala Gly Lys	
245		250	255
Ser Ser Leu Ala	Ser Gly Leu Leu Arg	Leu Gln Glu Ala Ala Glu	
260		265	270
Gly Gly Ile Trp	Ile Asp Gly Val Pro	Ile Ala His Val Gly Val	
275		280	285
His Thr Leu Arg	Ser Arg Ile Ser Ile	Ile Pro Gln Asp Pro Ile	
290		295	300
Leu Phe Pro Gly	Ser Leu Arg Met Asn	Leu Asp Leu Leu Gln Glu	
305		310	315
His Ser Asp Glu	Ala Ile Trp Ala Ala	Leu Glu Thr Val Gln Leu	
320		325	330
Lys Ala Leu Val	Ala Cys Leu Pro Gly	Gln Leu Gln Tyr Lys Cys	
335		340	345
Ala Asp Arg Gly	Glu Asp Leu Ser Val	Gly Gln Lys Gln Leu Leu	
350		355	360
Cys Leu Ala Arg	Ala Leu Leu Arg Lys	Thr Gln Ile Leu Ile Leu	
365		370	375
Asp Glu Ala Thr	Ala Ala Val Asp Pro	Gly Thr Glu Leu Gln Met	
380		385	390
Gln Ala Met Leu	Gly Ser Trp Phe Ala	Gln Cys Thr Val Leu Leu	
395		400	405
Ile Ala His Arg	Leu Arg Ser Val Met	Asp Cys Ala Arg Val Leu	
410		415	420
Val Met Asp Lys	Gly Gln Val Ala Glu	Ser Gly Ser Pro Ala Gln	
425		430	435
Leu Leu Ala Gln	Lys Gly Leu Phe Tyr	Arg Leu Ala Gln Glu Ser	
440		445	450
Gly Leu Val			